SEQUENCE LISTING

```
<110> Rosen et al.
<120> 36 Human Secreted Proteins
<130> PZ025P1C1D1
<150> 09/716,129
<151> 2000-11-17
<150> PCT/US99/03939
<151> 1999-02-24
<150> 60/076,053
<151> 1998-02-26
<150> 60/076,057
<151> 1998-02-26
<150> 60/076,052
<151> 1998-02-26
<150> 60/076,054
<151> 1998-02-26
<150> 60/076,051
<151> 1998-02-26
<160> 186
<170> PatentIn version 2
<210> 1
<211> 733
<212> DNA
<213> Homo sapiens
<400> 1
gggatccgga gcccaaatct tctgacaaaa ctcacacatg cccaccgtgc ccagcacctg
                                                                         60
aattegaggg tgcaccgtca gtcttcctct tccccccaaa acccaaggac accctcatga
                                                                        120
tctcccggac tcctgaggtc acatgcgtgg tggtggacgt aagccacgaa gaccctgagg
                                                                        180
tcaagttcaa ctggtacgtg gacggcgtgg aggtgcataa tgccaagaca aagccgcggg
                                                                        240
aggagcagta caacagcacg taccgtgtgg tcagcgtcct caccgtcctg caccaggact
                                                                        300
ggctgaatgg caaggagtac aagtgcaagg tctccaacaa agccctccca acccccatcg
                                                                        360
agaaaaccat ctccaaagcc aaagggcagc cccgagaacc acaggtgtac accctgcccc
                                                                        420
cateceggga tgagetgace aagaaceagg teageetgae etgeetggte aaaggettet
                                                                        480
atccaagcga catcgccgtg gagtgggaga gcaatgggca gccggagaac aactacaaga
                                                                        540
ccacgcctcc cgtgctggac tccgacggct ccttcttcct ctacagcaag ctcaccgtgg
                                                                        600
acaagagcag gtggcagcag gggaacgtet teteatgete egtgatgcat gaggetetge
                                                                        660
acaaccacta cacqcaqaaq aqcctctccc tqtctccqqq taaatqaqtq cgacqqccqc
                                                                        720
gactctagag gat
                                                                        733
<210> 2
```

1

<211> 5 <212> PRT

<213> Homo sapiens

```
<220>
<221> MISC_FEATURE
<222> (3)
<223> Xaa equals any of the twenty naturally occurring L-amino acids
<400> 2
Trp Ser Xaa Trp Ser
<210> 3
<211> 86
<212> DNA
<213> Artificial sequence
<220>
<223> Primer
<400> 3
gcgcctcgag atttccccga aatctagatt tccccgaaat gatttccccg aaatgatttc
                                                                         60
cccgaaatat ctgccatctc aattag
                                                                          86
<210> 4
<211> 27
<212> DNA
<213> Artificial sequence
<220>
<223> Primer
<400> 4
gcggcaagct ttttgcaaag cctaggc
                                                                          27
<210> 5
<211> 271
<212> DNA
<213> Artificial sequence
<220>
<223> synthetic GAS containing promoter element
ctcgagattt ccccgaaatc tagatttccc cgaaatgatt tccccgaaat gatttccccg
                                                                         60
aaatatctgc catctcaatt agtcagcaac catagtcccg cccctaactc cgcccatccc
                                                                        120
gcccctaact ccgcccaftt ccgcccattc tccgccccat ggctgactaa tttttttat
                                                                        180
ttatgcagag gccgaggccg cctcggcctc tgagctattc cagaagtagt gaggaggctt
                                                                        240
ttttggaggc ctaggctttt gcaaaaagct t
                                                                        271
<210> 6
<211> 32
<212> DNA
<213> Artificial sequence
<220>
<223> Primer
gcgctcgagg gatgacagcg atagaacccc gg
                                                                         32
```

```
<210> 7
<211> 31
<212> DNA
<213> Artificial sequence
<220>
<223> Primer
<400> 7
gcgaagcttc gcgactcccc ggatccgcct c
                                                                         31
<210> 8
<211> 12
<212> DNA
<213> Artificial sequence
<220>
<223> Primer
<400> 8
                                                                         12
ggggactttc cc
<210> 9
<211> 73
<212> DNA
<213> Artificial sequence
<220>
<223> Primer
<400> 9
geggeetega ggggaettte eeggggaett teeggggaet tteegggaet tteeateetg
                                                                         60
                                                                         73
ccatctcaat tag
<210> 10
<211> 256
<212> DNA
<213> Artificial sequence
<223> vector containing the NF-KB promoter element
<400> 10
ctcgagggga ctttccggg gactttccg ggactttcca tctgccatct
                                                                        60
caattagtca gcaaccatag tcccgcccct aactccgccc atcccgcccc taactccgcc
                                                                        120
cagttccgcc cattctccgc cccatggctg actaattttt tttatttatg cagaggccga
                                                                        180
ggccgcctcg gcctctgagc tattccagaa gtagtgagga ggcttttttg gaggcctagg
                                                                        240
cttttgcaaa aagctt
                                                                        256
<210> 11
<211> 1441
<212> DNA
<213> Homo sapiens
```

<400> 11	
ggcacgagtt ttatttatct tgcctagggt gtgttgggct tcataaatct gtggattggt	60
atctttcgtc agttctgtaa aagtctcagg tactctttgt taacattcgt ctctgcccca	120 180
tttttcttct agaattatga tcaaacatgc actaattaga ccttttattg tattctcttt gcttcttagg ctatgctctg aaaatttatt ttgtcctaat actcagttta tagttctgtc	240
ttgtttccaa tctgttgtta aatccctcct ttcaatttta aatctcagtt actgtatttt	300
ttaattctag aaggtcgttt ggttctttca aatccactag atcaagtcac tctctgtgac	360
ttcctacgac ctatattcta gcctttgcct tttattattt tttaacattg taagcaaagt	420
tgttttatag ttgataattc ttgtatctgt ggtctttgtc tcttcatact agctgttatt	480
tottaacagt titcoctgat cocacettae ticoteatag attigatiat ettigatiat	540
gtgctgctta ttttttttaa agataattat ctgtattaat atgagaccta gattttaaga	600
tacttcccct caggattgtg ctgtgtgcct gggcacattg caagtccaaa ttactttaaa	660
gtatcctaga acaccagagg tgaaaattca tgccattctc gtgcatcttt accttatggg	720
tatagcccat tgggaatcct tagtgtcggg agggagttct attacacctt ccacttcggg	780
cagatectgg getttgacat tegteetett cateataace aaatateaga ettgeetaat gegtaaatge eettggggta aageatetgt gttetgetta eeteteaggg tteetgettt	840 900
tccctttagc tttggttcca tcacttgtgt gttcaaccag tatgggaaac tgcctctaga	960
agcagtgttt taaaatttta gtctaaccat aaaaatagag aatgcttacc ctctggatat	1020
aaatgccata gcgataactt tgaactccta cattacatgc cttttatgta aggcaaacct	1080
cagtacacat tgagagacag tgtcatatac ttattaagat cacaggctct aaaatcagac	1140
tgccttgttt aaatcctggc cctgccatgt agtagtaacc tgtgttaatt tatgcaagat	1200
acgtaatctc tctgtgcctt ggtttcttcg tttaaaaagc agaataatag cttgcctcat	1260
gtggtcatta tgaaaaacaa acaaggccgg gcaccgtggc ttacgcctgt agtctcagca	1320
ctttgggagg ctgaggtggg cagatgacct gaggtcggga gtttgagacc agcctgccca	1380
acatggagga accccgtctc tactgaaaaa aaaaaaagag agagagagag agagaactag	1440
t	1441
<210> 12	
<211> 2160	
<212> DNA	
<212> DNA <213> Homo sapiens	
<213> Homo sapiens <400> 12	
<213> Homo sapiens <400> 12 ttttgaattc tatagattgt cttggaagga tactgtgtga tgggtcaggc acacagtaat	60
<213> Homo sapiens <400> 12 ttttgaattc tatagattgt cttggaagga tactgtgtga tgggtcaggc acacagtaat tggagacttt taatgtatgt aatatttcat agattgcatg ctattaatca tctgtgaggg	120
<213> Homo sapiens <400> 12 ttttgaattc tatagattgt cttggaagga tactgtgtga tgggtcaggc acacagtaat tggagacttt taatgtatgt aatatttcat agattgcatg ctattaatca tctgtgaggg tagtattttt tgttttattg taagtttccc tctttttta taaattaaaa gatggttggt	120 180
<213> Homo sapiens <400> 12 ttttgaattc tatagattgt cttggaagga tactgtgtga tgggtcaggc acacagtaat tggagacttt taatgtatgt aatatttcat agattgcatg ctattaatca tctgtgaggg tagtatttt tgttttattg taagtttccc tctttttta taaattaaaa gatggttggt attaggaatt tcaaatgaat gcagaaaatc ttacatgctg tgtactatta atattataac	120 180 240
<213> Homo sapiens <400> 12 ttttgaattc tatagattgt cttggaagga tactgtgtga tgggtcaggc acacagtaat tggagacttt taatgtatgt aatatttcat agattgcatg ctattaatca tctgtgaggg tagtattttt tgttttattg taagtttccc tctttttta taaattaaaa gatggttggt attaggaatt tcaaatgaat gcagaaaatc ttacatgctg tgtactatta atattataac agacgatcca agtccaaaat ctgaccaata aagcaaccat tttatcaaga tagagggatt	120 180 240 300
<213> Homo sapiens <400> 12 ttttgaattc tatagattgt cttggaagga tactgtgtga tgggtcaggc acacagtaat tggagacttt taatgtatgt aatattcat agattgcatg ctattaatca tctgtgaggg tagtatttt tgttttattg taagtttccc tctttttta taaattaaaa gatggttggt attaggaatt tcaaatgaat gcagaaaatc ttacatgctg tgtactatta atattataac agacgatcca agtccaaaat ctgaccaata aagcaaccat tttatcaaga tagagggatt ctaatgggag aggggattct tccctcctga agtttgtgtg tccagtcccc ttaaaaaaaa	120 180 240 300 360
<213> Homo sapiens <400> 12 ttttgaattc tatagattgt cttggaagga tactgtgtga tgggtcaggc acacagtaat tggagacttt taatgtatgt aatattcat agattgcatg ctattaatca tctgtgaggg tagtattttt tgttttattg taagtttccc tctttttta taaattaaaa gatggttggt attaggaatt tcaaatgaat gcagaaaatc ttacatgctg tgtactatta atattataac agacgatcca agtccaaaat ctgaccaata aagcaaccat tttatcaaga tagagggatt ctaatgggag aggggattct tccctcctga agtttgtgt tccagtcccc ttaaaaaaaa tgaatagttg tcttttcttg tgcatattaa tactcgaaag tgccatggtg gtattaatga	120 180 240 300 360 420
<213> Homo sapiens <400> 12 ttttgaattc tatagattgt cttggaagga tactgtgtga tgggtcaggc acacagtaat tggagacttt taatgtatgt aatattcat agattgcatg ctattaatca tctgtgaggg tagtatttt tgttttattg taagtttccc tctttttta taaattaaaa gatggttggt attaggaatt tcaaatgaat gcagaaaatc ttacatgctg tgtactatta atattataac agacgatcca agtccaaaat ctgaccaata aagcaaccat tttatcaaga tagagggatt ctaatgggag aggggattct tccctcctga agtttgtgtg tccagtcccc ttaaaaaaaa	120 180 240 300 360
<pre><213> Homo sapiens <400> 12 ttttgaattc tatagattgt cttggaagga tactgtgtga tgggtcaggc acacagtaat tggagacttt taatgtatgt aatattcat agattgcatg ctattaatca tctgtgaggg tagtattttt tgttttattg taagtttccc tctttttta taaattaaaa gatggttggt attaggaatt tcaaatgaat gcagaaaatc ttacatgctg tgtactatta atattataac agacgatcca agtccaaaat ctgaccaata aagcaaccat tttatcaaga tagagggatt ctaatgggag aggggattct tccctcctga agtttgtgtg tccagtcccc ttaaaaaaaa tgaatagttg tcttttcttg tgcatattaa tactcgaaag tgccatggtg gtattaatga aagtacactt tattgttgcc tttgaactta cggccaaggc aataaatcag aaacaaaaat</pre>	120 180 240 300 360 420 480
<213> Homo sapiens <400> 12 ttttgaattc tatagattgt cttggaagga tactgtgtga tgggtcaggc acacagtaat tggagacttt taatgtatgt aatattcat agattgcatg ctattaatca tctgtgaggg tagtatttt tgttttattg taagtttccc tctttttta taaattaaaa gatggttggt attaggaatt tcaaatgaat gcagaaaatc ttacatgctg tgtactatta atattataac agacgatcca agtccaaaat ctgaccaata aagcaaccat tttatcaaga tagagggatt ctaatggag aggggattct tccctcctga agtttgtgtg tccagtcccc ttaaaaaaaa tgaatagttg tcttttcttg tgcatattaa tactcgaaag tgccatggtg gtattaatga aagtacactt tattgttgcc tttgaactta cggccaaggc aataaatcag aaacaaaaat agtgccaatg tgtcaaaatc gacatctgag agattcagcc tcccatttgg aataaatag	120 180 240 300 360 420 480 540
<213> Homo sapiens <400> 12 ttttgaattc tatagattgt cttggaagga tactgtgtga tgggtcaggc acacagtaat tggagacttt taatgtatgt aatattcat agattgcatg ctattaatca tctgtgaggg tagtatttt tgttttattg taagtttccc tctttttta taaattaaaa gatggttggt attaggaatt tcaaatgaat gcagaaaatc ttacatgctg tgtactatta atattataac agacgatcca agtccaaaat ctgaccaata aagcaaccat tttatcaaga tagagggatt ctaatggag aggggattct tccctcctga agtttgtgt tccagtcccc ttaaaaaaaa tgaatagttg tcttttcttg tgcatattaa tactcgaaag tgccatggtg gtattaatga aagtacactt tattgttgcc tttgaactta cggccaaggc aataaatcag aaacaaaaat agtgccaatg tgtcaaaatc gacatctgag agattcagcc tcccatttgg aataaatatg aatcttctaa gctatcttgt ttaatattt ccatcattta gctacttcct atctccctca gaggcgcctg ctgttcccat tttagagttg acagtggcct gctaattttg ctatgttcct aaaagttact gggtgtgaga cattttcatc ccctccttt tcctactgct ggtgtttatt	120 180 240 300 360 420 480 540 600 660 720
<213> Homo sapiens <400> 12 ttttgaattc tatagattgt cttggaagga tactgtgtga tgggtcaggc acacagtaat tggagacttt taatgtatgt aatattcat agattgcatg ctattaatca tctgtgaggg tagtatttt tgttttattg taagttccc tctttttta taaattaaaa gatggttggt attaggaatt tcaaatgaat gcagaaaatc ttacatgctg tgtactatta atattataac agacgatcca agtccaaaat ctgaccaata aagcaaccat tttatcaaga tagagggatt ctaatggag aggggattct tccctcctga agtttgtgt tccagtccc ttaaaaaaaa tgaatagttg tcttttcttg tgcatattaa tactcgaaag tgccatggtg gtattaatga aagtacactt tattgttgcc tttgaactta cggccaaggc aataaatcag aaacaaaaat agtgccaatg tgtcaaaatc gacatctgag agattcagcc tcccatttgg aataaatatg aatcttctaa gctatcttgt ttaatattt ccatcatta gctacttcct atctcctca gaggcgcctg ctgttcccat tttagagttg acagtggcct gctaattttg ctatgttcct aacagctag acaatattt atgcatattt accgtgatgt ctggaccgta cctgtgctcc	120 180 240 300 360 420 480 540 600 660 720 780
<pre><213> Homo sapiens <400> 12 ttttgaattc tatagattgt cttggaagga tactgtgtga tgggtcaggc acacagtaat tggagacttt taatgtatgt aatattcat agattgcatg ctattaatca tctgtgaggg tagtattttt tgttttattg taagtttccc tctttttta taaattaaaa gatggttggt attaggaatt tcaaatgaat gcagaaaatc ttacatgctg tgtactatta atattataac agacgatcca agtccaaaat ctgaccaata aagcaaccat tttatcaaga tagagggatt ctaatggag aggggattct tccctcctga agtttgtgt tccagtcccc ttaaaaaaaa tgaatagttg tcttttcttg tgcatattaa tactcgaaag tgccatggtg gtattaatga aagtacactt tattgttgcc tttgaactta cggccaaggc aataaatcag aaacaaaaat agtgccaatg tgtcaaaatc gacatctgag agattcagcc tcccatttgg aataaatatg aatcttctaa gctatcttgt ttaatattt ccatcatta gctacttcct atctccctca gaggcgcctg ctgttcccat tttagagttg acagtggcct gctaattttg ctatgttcct aaaagttact gggtgtgaga cattttcatc ccctccttt tcctactgct ggtgtttatt atccagctag acaatattt atgcatattt accgtgatgt ctggaccgta cctgtgctcc ttggcagttt atgttgaaga taactaaaga tttttctctt tgggaggcat caaaatgatg</pre>	120 180 240 300 360 420 480 540 600 660 720 780 840
<pre><213> Homo sapiens <400> 12 ttttgaattc tatagattgt cttggaagga tactgtgtga tgggtcaggc acacagtaat tggagacttt taatgtatgt aatattcat agattgcatg ctattaatca tctgtgaggg tagtattttt tgttttattg taagtttccc tctttttta taaattaaaa gatggttggt attaggaatt tcaaatgaat gcagaaaatc ttacatgctg tgtactatta atattataac agacgatcca agtccaaaat ctgaccaata aagcaaccat tttatcaaga tagagggatt ctaatgggag aggggattct tccctcctga agtttgtgt tccagtccc ttaaaaaaaa tgaatagttg tcttttcttg tgcatattaa tactcgaaag tgccatggtg gtattaatga aagtacactt tattgttgcc tttgaactta cggccaaggc aataaatcag aaacaaaaat agtgccaatg tgtcaaaatc gacatctgag agattcagcc tcccatttgg aataaatag aatcttctaa gctatcttgt ttaatattt ccatcattta gctacttcct atccccca gaggcgcctg ctgttcccat tttagagttg acagtggcct gctaattttg ctatgttcct aacagctag cagtttgct atgtgaaga cattttcatc ccctccttt tcctactgct ggtgtttatt atccagctag acaatattt atgcatattt accgtgatgt ctggaccgta cctgtgctcc ttggcagttt atgttgaaga taactaaaga tttttctctt tgggaggcat caaaatgatg gtagtttgct tttatcttt tatgttcatt ttcttttagt aggtgacctt tctgcattaa</pre>	120 180 240 300 360 420 480 540 600 660 720 780 840 900
<pre><400> 12 ttttgaattc tatagattgt cttggaagga tactgtgtga tgggtcaggc acacagtaat tggagacttt taatgtatgt aatatttcat agattgcatg ctattaatca tctgtgaggg tagtattttt tgttttattg taagtttccc tctttttta taaattaaaa gatggttggt attaggaatt tcaaatgaat gcagaaaatc ttacatgctg tgtactatta atattataac agacgatcca agtccaaaat ctgaccaata aagcaaccat tttatcaaga tagagggatt ctaatgggag aggggattct tccctcctga agtttgtgt tccagtcccc ttaaaaaaaa tgaatagttg tcttttcttg tgcatattaa tactcgaaag tgccatggtg gtattaatga aagtacactt tattgttgcc tattgaactta agactagac aataaatcag aaacaaaaat agtgccaatg tgtcaaaatc gacatctgag agattcagcc tcccatttgg aataaatag aatcttctaa gctatcttgt ttaatattt ccatcattta gctacttcct atctccctca gaggcgcctg ctgttcccat ttagagttg acagtggcct gctaattttg ctatgttcct aaaagttact gggtgtgaga caattttcatc acctcctttt tcctactgct ggtgtttatt atccagctag ttatctttt tatgttcatt tttttctctt tgggaggcat caaaatgatg gtagtttgct tttatctttt tatgttcatt ttcttcttt ttctcttt ttgggaggcat caaaatgatg gtagtttgct tttatctttt tatgttcatt ttcttcttt gtggagacag catgacatgt</pre>	120 180 240 300 360 420 480 540 600 660 720 780 840 900 960
<pre><400> 12 ttttgaattc tatagattgt cttggaagga tactgtgtga tgggtcaggc acacagtaat tggagacttt taatgtatgt aatatttcat agattgcatg ctattaatca tctgtgaggg tagtattttt tgttttattg taagtttccc tctttttta taaattaaaa gatggttggt attaggaatt tcaaatgaat gcagaaaatc ttacatgctg tgtactatta atattataac agacgatcca agtccaaaat ctgaccaata aagcaaccat tttatcaaga tagagggatt ctaatggag aggggattct tccctcctga agtttgtgg tccagtccc ttaaaaaaaa tgaatagttg tctttcttg tgcatattaa tactcgaaag tgccatggt gtattaatga aagtacactt tattgttgcc tttgaactta cggccaaggc aataaatcag aaacaaaaat agtgccaatg tgcaaaatc gacatctgag agattcagcc tccatttgg aataaatatg aatcttctaa gctatcttgt ttaatattt ccatcatta gctactcct atcccctca gaggcgcctg ctgttcccat tttagagttg acagtggcct gctaatttg ctatgttcct aaaagttact gggtgtgaga cattttcatc ccctcctttt tcctactgct ggtgtttatt atccagctag acaatattt atgcatattt accgtgatg tctggaccgta cctgtgctcc ttggcagttt atgttgaaga taactaaaga tttttctctt tgggaggcat caaaatgatg gtagtttgct tttatcttt tatgttcatt ttcttttagt aggtgacag catgacatgt cctgaaggtc acctttgcct ttgaaaaagg ttttccttt tgggaggcac caagacatgt cctgaaggtc acctttgcct ttgaaaaagg tttgatggag gaattcacag gtgacctgac</pre>	120 180 240 300 360 420 480 540 600 660 720 780 840 900 960 1020
<pre><400> 12 ttttgaattc tatagattgt cttggaagga tactgtgtga tgggtcaggc acacagtaat tggagacttt taatgtatgt taagtttccc tctttttta taaattaaaa gatggttggt attaggaatt tcaaatgaat gcagaaaatc ttacatgctg tgtactatta atattaaac agacgatcca agtccaaaat ctgaccaata aagcaaccat tttatcaaga tagagggatt ctaatgggag aggggattct tccctcctga agtttgtgt tccagtccc ttaaaaaaaa tgaatagttg tcttttcttg tgcatattaa tactcgaaag tgccatggtg gtattaatga aagtacactt tattgttgcc tttgaactta cggccaaggc aataaatcag aaacaaaaat agtgccaatg tgtcaaaatc gacatctgag agattcagcc tcccatttgg aatacttcaa agggcgcctg ctgttcccat tttagagttg acagtgccc gctaatttat gcacatttag aaaagttact gggtgtgaga catttcatc ccctcctttt tcctactcgct ggtgtttatt atccagctag acaatattt atgatgtcatt accgtgatgt ctggaccgta cctgtgccc ttggcagttt atgttgaaga tacttaatt accgtgatgt ctggaccgta cctgtgtgccc ttggcagttt tatctttt tatgttcatt tcctcttttttagt aggtgacctt tctgcattaa gaactgtttt tatcttttac tacctttct ttttagtagag gaattcacag gtgacctgacaggccaggc</pre>	120 180 240 300 360 420 480 540 600 720 780 840 900 960 1020 1080
<pre><400> 12 ttttgaattc tatagattgt cttggaagga tactgtgtga tgggtcaggc acacagtaat tggagacttt taatgtatgt aatatttcat agattgcatg ctattaatca tctgtgaggg tagtattttt tgttttattg taagtttccc tctttttta taaattaaaa gatggttggt attaggaatt tcaaatgaat gcagaaaatc ttacatgctg tgtactatta atattataac agacgatca agtccaaaat ctgaccaata aagcaaccat tttatcaaga tagagggatt ctaatgggag agggattct tcctcctga agtttgtgt tccagtcccc ttaaaaaaaa tgaatagttg tcttttcttg tgcatattaa tactcgaaag tgccatggtg gtattaatga aagtacactt tattgttgcc tttgaactta cggccaaagg aataaatcag aaacaaaaat agtgccaatg tgtcaaaatc gacatctgag agattcagcc tcccatttgg aataatatg aatcttctaa gctatcttgt ttaatattt ccatcattta gctacttcct atccccca gaggcgcctg ctgttcccat tttagagttg acagtggcct gctaattttg ctatgttcct aaaagttact gggtgtgaga catttcatc ccctcctttt tcctactgct ggtgtttatt atccagctag acaatattt atgcatatt accgtgatgt ctggaccgta cctgtgctcc ttggcagtt ttatctttt tatgttcatt tcttttagt aggtgacct tctggaggac gtagtttgct ttatctttt tatgttcatt ttcttttag gaactgtttt tatcttttac tacctttct ttctctttt gtggagacag catagatg cctgaaggtc acctttgcct ttggaaaaag tttgatgag gaattcacag gtggaccaa agtctttgaa aagaatggga tctgctcact tctggtcttt ttggccgga actcctgatt ggtgttaagg tggtaatttc ccccatataa gatttagaat cactgagttt gagctagatg ggtgttaagg tggtaattc</pre>	120 180 240 300 360 420 480 540 600 720 780 840 900 960 1020 1080 1140
<pre><410> 12 ttttgaattc tatagattgt cttggaagga tactgtgtga tgggtcaggc acacagtaat tggagacttt taatgtatgt aatattcat agattgcat ctttttta taaattaaaa gatggttggt tagtatttt tgtttattg taagttccc attaggaatt tcaaatgaat gcagaaaatc agacgatcca agtccaaaat ctgaccaata aggcaaccat tttatcaaga tagagggattc ctaatgggag aggggattct tccctctga agtttgtgt tccagtcccc ttaaaaaaa tgaatagttg tctttcttg tgcatattaa tactcgaaag tgccatggtg gtattaatga aagtacactt tattgttgcc tttgaactta cggccaaggc aataaatcag aaacaaaaat agtgccaatg gctacttgt tgaactta ccactatta gcacatctga ggattcagcc tcccatttgg aagtgcgcctg ctgttccat tttagagttg acagtggcct gctaatttt atgagttg acagtggcct ggtgttaatt atgcaagtt atgtgaaga tactttcatc ccctccttt tcctactgct ggtgtttatt atccagctag acaatattt tatgttcatt tttctctt tagttcatt tttctcttt tagttcatt tttctcttt tagttcatt tttctcttt tagttcatt tttctcttt tagttcatt ttcttttag aggtgacctt tctgcattaa gaactgttt ttatcttt tagttcatt tttctcttt ttctcttt ttctcttt tagttcatt ttctctctt ttcctcatgg gaatcacatg gtagtttgct tttatcttt tagttcatt ttcttttag aggtgacct tctgcattaa gaactgtttt tacctttca tacctttct ttcctcttt ttggagagaca catgacatgt gtgttaaggt tggtaatttc ccccatataa gaattagaat cactgagtt gagctagaca agtctttgaa aagaatggga tctgctcatta gactgatgag gtagtttc ttctctata ggtgttaagg tggtaatttc ccccatataa gatttagaat cactgagttt gagctagatg aactttttaa cccctatata gatttagaat cactgagttt ttctctatat</pre>	120 180 240 300 360 420 480 540 600 720 780 840 900 960 1020 1080 1140 1200
<pre><410> 12 ttttgaattc tatagattgt cttggaagga tactgtgtga tgggtcaggc acacagtaat tggagacttt taatgtatgt taagttccc tcttttta taaattaaaa gatggtggt tagtatttt tgtttattg taagttccc tctttttta taaattaaaa gatggtggt tctataggaatt tcaaatgaat gcagaaaacc tttatacaaa gatggtggt ctaatgggag aggggattct tccctcctga agtttgtgg tcaagtccc ttaaaaaaaa tgaatagttg tctttcttg tgcatattaa tactcgaaag tgccatggtg gtattaatga aagtacactt tattgttgcc tttgaactta cggccaaggc aataaatcag aagtgccaatg tgtcaaaatc gacatctgag agattcagcc tccattttg aataaatcag aactctctaa gctatctgt ttaatttt gaggggcctg ctgttcccat tttagagttg acagtgccatttt ccctccta gaggggcctg ctgttcccat tttagagttg acagtgccatttt tcctcctca gaggggctt atgttgaaga tacttctac ccctcctttt tcctactcct acagtgccc ttggcagttt atgttgaaga taactaaaaa gttgttgct tttatcttt tatgttcatt tcctctttttt tcctactgct ggtgtttatt gaactgtttt tatctttta tactttctt tatgttcatt tcctttagt ggtgagaca caaaatgatg gtagtttgct tttatctttt tatgttcatt ttcttcttt tgggaggcat caaaatgatg gtagtttgct tttatctttt tatgttcatt ttcttcttt tgggaggcat caaaatgatg gtagtttgct tttatctttt tatgtcatt ttctctctt tcctactgct ggtgtttatt gaactgtttt tacttttac tacctttct ttcttcttt tgggaggcat caaaatgatg gtagtttgaa aacttttac tacctttct ttctcttttag gagtgacctt tctgcattaa gactgtttaaagg tggtaatttc ccccatataa gattgagag gattcagaca ggttttgaa aagaatggga tctgccact ggtgttaaagg tggtaatttc ccccatataa gattgagag gattcagaca agtctttgaa aagaatggga tctgccact ggtgttaaagg tggtaatttc ccccatataa gattgagag gtagtttttaaaaacag tggtcccattaaa cactcggttt tctgcattaa gattgaaga tagtaagag tctgccact ggtgttaaagg tggtaatttc ccccatataa gattgagag gtagttttt tctctataaaacag gtgtttaaagag tggtaatttc ccccatataaa gattgagag gattcacttaaa gattgagaat cctggccact ggtgttaaagg gtagttttaaaacag gtggtaatttc ccccatataa gattgagaat gattagagaat gattaaacag gattaaacag gattaaacag gattaaacag gattaaacag gattaacag gattaacag gattaacag gattaacag gattaacag gattaacag gattaacag gattaacag</pre>	120 180 240 300 360 420 480 540 600 720 780 840 900 960 1020 1080 1140
<pre><410> 12 ttttgaattc tatagattgt cttggaagga tactgtgtga tgggtcaggc acacagtaat tggagacttt taatgtatgt aatattcat agattgcatg ctattaatca tctgtgaggg tagtattttt tgttttattg taagtttccc tctttttta taaattaaaa gatggttggt attaggaatt tcaaatgaat gcagaaaatc ttacatgctg tgtactatta atattataac agacgatcca agtccaaaat ctgaccaata aggcaaccat tttatcaaga tagagggatt ctaatgggag tcttttcttg tgcatattaa tactcgaaag tgccatggt gtattaatga aggtacactt tattgttgcc tttgaacta cggccaaggc aataaatcag aaacaaaaat gaatagttg tgtcaaaatc gacatctgag agattcagc tccatttgg aagtaccatt tattgttgcc tttgaacta cggccaaggc aataaatcag aaacaaaaat gacgcgatg ctgttccat tttagagtg agattcagcc tccatttgg aacatttcaa gctatcttgt ttaatattt ccatcattta gctacttct accagcagc acaaatattt accagcagc tctcatttta tattcaaga tggagggcctg ctgttcccat tttagagttg acagtggcct gctaattttg ctatgtcct ttggcagtt atgttgaaga taactaaaga ttcttcttt tcttctctt tggagggct tcttatctt tccttcttg gaactgtttt tatctttta tacttttat tccttttagt ggaggagac caaaatgatg gtagtttgaa accatttgcct ttgaaaaagg ttggaggaga cattcacag gtgagagaca aggtcttgaa ggtgttaagg tggtaatttc ccccatataa gactgaggg gaattcacag gtgactgaca aggtctttgaa aagaatggga tctgctcatt ggtgttttt ttctctata gacagctag ttaatacag cagagttct cccatataa gacagctag ttaatacaag gtgaatttc tccctcatt gagaggtc cacacaaca ttttaccacg gtgacacacacacacacacacacacacacacacacacaca</pre>	120 180 240 300 360 420 480 540 600 720 780 840 900 960 1020 1080 1140 1200 1260
<pre><400> 12 ttttgaattc tatagattgt cttggaagga tactgtgtga tgggtcaggc acacagtaat tggagacttt taatgtatgt aatattcat agattgcatg ctattaatca tctgtgaggg tagtattttt tgttttattg taagtttccc tcttttttta taaattaaaa gatggttggt attaggaatt caaatgaat gcagaaaatc ttacatgctg tgtactatta atattaaac agacgatcca agtccaaaat ctgaccaata aagcaaccat tttatcaaga tagagggatt ctaatgggag aggggattct tccctctga agtttgtgtg tccagtccc ttaaaaaaa tgaatagttg tcttttcttg tgcatattaa tactcgaaag tgccatggtg gtattaatga aagtacactt tattgttgcc tttgaactta cggccaaggc aataaatacag aaacaaaaat agtgccaatg tgtcaaaatc gacatctgag agattcagcc tcccatttgg aataatttt caacattctaa gctactttgt ttaatatttt ccatcattta gctacttcta gaggcgcctg ctgttcccat tttagagttg acagtggcct gctaatttt ttcctctg aaaagttact gggtgtgaga cattttcatc ccctcctttt tcctactgct ggtgtttatt atccagctag acaatattt atgcattatt accgtgatgt ctggaccgta cctgtgctcc ttggcagtt tttactttt tatgttcct ttcttcttt ttcttcttt ttcttctttttctttt tatgttcctt ttcttcttt ttcttctttt tcctactgct ggtgtttatt accagctag tatctttact ttcttttt ttcttctttt ttcttctttt tggcaggacat ccaaaatgatg ttgtttgct tttactttt tatcttttt tatgttcatt ttcttttatt tgggagacat ctctgattaa gaactgtttt tatcttttac taccttttct ttctctcttt ttggcaggac catagacatgt cctgaaggtc acctttgcct ttgaaaaagg tcttgatgag gaattcacag gtgactgaca agtctttgaa aagaatggga tctgccattaa gattagaat cactgagttt gggtgtaattc ccccatataa gattagaga tctgacaaaattt taccttttct ttctccttt ttggcggga actcctgatt ggtgttaagg tggtaattc ccccatataa gattagaga gaattcacag gtgactgaca agtctttaa aattctcgg tgtccatta gactgatgg ggagtttt ttctctatat gacacacact ttaatacag cagagttctc accagtgct cagtacttaa ttttccatt gacacacacact ttaatacag cagagttctc accagtgct cagtacttaa ttttccactt gacacacacact ttaatacag cagagttctc accagtgct cagtacttaa ttttccactt gacacacacac ttaatacacg cagagttctc accacacact ttttcacacag ttttccatt gacacacacac gtcttaacaa gagagtcttt aattttctttt gacacacacacacc gtcttaacaa cagagttctc accacagtct ttttctcatt gacacacacacc gtcttaacacacacacacacacacacacacacacacacac</pre>	120 180 240 300 360 420 480 540 600 720 780 840 900 960 1020 1080 1140 1200 1260 1320
<pre><410> 12 ttttgaattc tatagattgt cttggaagga tactgtgtga tgggtcaggc acacagtaat tggagacttt taatgtatgt aatattcat agattgcatg ctattaatca tctgtgaggg tagtattttt tgttttattg taagtttccc tctttttta taaattaaaa gatggttggt attaggaatt tcaaatgaat gcagaaaatc ttacatgctg tgtactatta atattataac agacgatcca agtccaaaat ctgaccaata aggcaaccat tttatcaaga tagagggatt ctaatgggag tcttttcttg tgcatattaa tactcgaaag tgccatggt gtattaatga aggtacactt tattgttgcc tttgaacta cggccaaggc aataaatcag aaacaaaaat gaatagttg tgtcaaaatc gacatctgag agattcagc tccatttgg aagtaccatt tattgttgcc tttgaacta cggccaaggc aataaatcag aaacaaaaat gacgcgatg ctgttccat tttagagtg agattcagcc tccatttgg aacatttcaa gctatcttgt ttaatattt ccatcattta gctacttct accagcagc acaaatattt accagcagc tctcatttta tattcaaga tggagggcctg ctgttcccat tttagagttg acagtggcct gctaattttg ctatgtcct ttggcagtt atgttgaaga taactaaaga ttcttcttt tcttctctt tggagggct tcttatctt tccttcttg gaactgtttt tatctttta tacttttat tccttttagt ggaggagac caaaatgatg gtagtttgaa accatttgcct ttgaaaaagg ttggaggaga cattcacag gtgagagaca aggtcttgaa ggtgttaagg tggtaatttc ccccatataa gactgaggg gaattcacag gtgactgaca aggtctttgaa aagaatggga tctgctcatt ggtgttttt ttctctata gacagctag ttaatacag cagagttct cccatataa gacagctag ttaatacaag gtgaatttc tccctcatt gagaggtc cacacaaca ttttaccacg gtgacacacacacacacacacacacacacacacacacaca</pre>	120 180 240 300 360 420 480 540 600 720 780 840 900 960 1020 1080 1140 1200 1260 1320 1380
<pre><400> 12 ttttgaattc tatagattgt tatagattgt tatagattgt tatagagadttt taatgtatgt taatgttcc tatatgatgt tagtatttt tagtttattg tagtttccc tctttttta taaattaaaa gatggttggt attaggaatt tcaaatgaat gcagaaaatc tcaatgggag tcttttcttg tagaccaata aagcaaccat tttatcaaga tagaggggttt tcaatgggag tcttttcttg tgcatatta tacctgaaag tgccaatg tcttttcttg tgcatatta tacctgaaag tgccaatgggag tagtacactt tattgttgcc tattgttgtg tcccatcaagagggggttc tcaatgggag tctttcctag aggtgcaatgg tcttttcttg tgcatattaa tactcgaaag tgccatggtg gtattaatga aagtacactt tattgttgcc tattgaactta aggccaatgg agatcacct tattgttgcc aacacttgag aggtgccaaggc aataaatcag aacaaaaat taggggggcct gggattccaat tattgaactta aggccaatgg agatcaccc tattgaagtgag acactctgag agatcaccc tcccatttgg aataaatttg acagtgggcct gggttgaga cattttcatc ccctccttt tcctactgct ggtgtttatt atccagctag acaatatttt tatgattgt tatctttac cagtgatgt tttatcttt tatctttac tacctttct tcctacaggagc acaatagatggggt tagttttaga agaatgggag tctgtccatt tatctttac tacctttct tcctactct tcctcttt tcctacagggagacag catgacatgt tatctttac taccttttct ttctccttt tcctcttt tcctcatcggagacag catgacatgt tatctttaa agacaggtag tcgtaattc tacctttct tcctcttt tcctcttt tgggagagca catgacatgt tcggacaggc tcggaacaggc tcggaacagg tcggaacaggc tcggaacagggaacaggggaacaggggaacaggggaacaggggaacaggggaacaggggaacaggggaacaggggaacaggggaacaggggaacaggggaacaggggaacaggggaacaggggaacagggaacagggaa</pre>	120 180 240 300 360 420 480 540 600 720 780 840 900 960 1020 1080 1140 1200 1260 1320 1380 1440

```
gattaaatgg aggcattqaq ctcattacct ttaagtttac tttgtqctqa cctttqttcc
                                                                   1620
tgttttgaga atctcatata attattaaaa aaaaaaaaca attaaaacga aacggcgggg
                                                                   1680
cctagctgtg tataaatqat ccttgctqaa tatcttaaqq ttttttgtaa gaaaaaaqaa
                                                                   1740
aaaccaacaa aaaaagctta ttttcacatt aaaatgaaac ctcttttgca acttaagaat
                                                                   1800
tctatgqaaa agcagttttt atcatatttt gtgtccatgc accatttttc ttaaaatggc
                                                                   1860
ttacaaaaaa gaatgtaaac aatttgtgat ctggccagtt gtacttttag ctcccagagg
                                                                   1920
gagagttggt ggtattatga gttgagtaaa aaccatccag gggaacttga gggagcagtc
                                                                   1980
tgttgccagt aatgttcctt gtgtgccatt aaaccacctc cagatgagtg gaggaacatc
                                                                   2040
actttttaat tttttaattg tatttggaat tgttgccqtq tactaagaac ttgacctaaa
                                                                   2100
2160
<210> 13
<211> 1202
<212> DNA
<213> Homo sapiens
<400> 13
gggtcgaccc acgcgtccgg ttttttttaga aatagaagtg cttacagatt tgtttgagca
                                                                     60
gaatagatac ccatgttcag agagagagag agagagccat tgagaggcas agagtgccqa
                                                                    120
atgtgaattc tgtgtaaatt gaaaagttac ggtccccgtc cataaggaga tggctctggt
                                                                    180
tgtcttgaat ttagacagct ttccagagga ggaggttctc tcctgcagca gtgtgggaaa
                                                                    240
aaaatctacc agatttggac cagaatgact gcaatttagq tcagaacatq atacttagaq
                                                                    300
ggaaaaaaqt aatcatggct tgaatagctq ccctaagqcc aqctacagqq ctqcaqqqtc
                                                                    360
tgtggacctt tcttgtcaga actcaggatc cttaggagtc cccacaaggg catggaggct
                                                                    420
gtggccatca tgagtggaag aaccagcttc caaaggaacc taggattgtt ctggccctgg
                                                                    480
ctccaggtgc atatctctgc tttccgtgag cattgaatgg gaaatcacgt gttagcagaa
                                                                    540
taaatcccag aatacacatt caggaggaga tggttccaca tggcacgtaa gtcctttgcc
                                                                    600
ttattgatgt ttgtctggca gatgtcctta agccttccca tcaagggctt tattctaagg
                                                                    660
gtggctaact ggctatttaa acctcatctc aatagtgtct gtctaggatg gcaaaatcac
                                                                    720
accaggttet getgggeaaa teteceaggt ggegtattge tagaggagag egecactgea
                                                                    780
gaggacacac tgtcttggcc actggctttg caaaccatag tggaggaggg agtctggggt
                                                                    840
caccaaccac ttcctggctg actgcctgag ccacattata caagactgtt tgttgactta
                                                                    900
gtaatactga agccagagct caccaagatt ctgacatcaa gcatgaaaqt gactaattct
                                                                    960
ttcawttccc agcactttga caaaggggac tctcttaaaa ctcctcatcq gacqttaqtq
                                                                   1020
gaagtcgact catgtatcta aacatgtagc cagcgtaagt tcttqqtcaq attqatctaa
                                                                   1080
tgactttttt agcgtgtgtg tgtgtgtgtg tgtgtgtgtt taatcttttt aagtttgggt
                                                                   1140
1200
                                                                   1202
ag
<210> 14
<211> 1554
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (695)
<223> n equals a,t,q, or c
<220>
<221> misc feature
<222> (874)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (1190)
<223> n equals a,t,g, or c
```

```
gctttaatag tgtacactta cacatctgga aggaagagag ttccatatgg cagggatgat
                                                                       60
tgggacagga gggatctttt gataactttg tgtgagcatg aaaatcgaat ggggaaggga
                                                                      120
gagctgtgaa aaaaaatgt tatctctttt tttttgcttc tggaaaccca gctttttggt
                                                                      180
cagccgtctt gtgatttggc tgggcctggt ttgtgggggt cgctctctga gttgggtagc
                                                                      240
tettggagaa gattatetgg gaaeteecat eettateeca aacatacace aaacetgeee
                                                                      300
ccatccacca ttatgggaat tagtaccaga gcatccttgc agattagttc tcattttctc
                                                                      360
tetttgtgag cacacaca teaggtagag ttecagaaac ceagetttag gacactgtte
                                                                      420
acatatcaca ggaggagcaa ggacatgaat acaagagagc tctttcctga ccagcagtgg
                                                                      480
gargtggttg tactatctat ttawttgttt attwatttat ttattttttg agatggartc
                                                                      540
teettetgte acceaggetg gagtgeagtg geatgatete ggeteactge aatetetgee
                                                                      600
tectgggtte aageagteet eetgeeteag eeceecaagt agetgsgatt acaggetgea
                                                                      660
ccaccatgcc ccgctaattt ttgtattttt agtanagatg gggtttcacc atgttggcca
                                                                      720
ggctggtctg taactcctga mctcaggtga tccacctgcc ttagcctccc aaggtgctgg
                                                                      780
gattacaggt gtgagccacc gtgcccggsc tggttccact atttattaaa atgtatatat
                                                                      840
gtgttttyca cttttttggt aggcatttta ttgntaataa tttggaaatt aaaaaaattt
                                                                      900
ctccacaage ttattttttg tggagacaag gtctccctgt gttgcctagg ctggtcttga
                                                                      960
attectggge taagtgattg gtetgeettg geeteteaaa gtgetgggga ttacaggeat
                                                                     1020
aagtcaccat gccctgtttg scagcaagkt ttawackgct ctttttggta gggawwtkct
                                                                     1080
maggtwcagt gatagagaac atgkagttgt ggtgggawac agtggctyat gactgtatcc
                                                                     1140
gcactttggg aggctgaggc aggaggattg cttgaggctg agagttgagn acaggcctgg
                                                                     1200
gcaacatagc aagacacctt ctctaaaatg aaaaaaatta gctggatgtg gtgtcatgta
                                                                     1260
cctgtagtcc cagttgcttg ggaggctgag gcaggaggat cacttgagcc tgggtgttca
                                                                     1320
agataggcct ggtcaacaca gcaagacccc ttctctaaaa atgaaaataa aaaaattagc
                                                                     1380
tggttgtggt ggcatgtacc tgtagtccca gttacttggg aggctgagac aggaggattg
                                                                     1440
cttgagccag gggtttgagg ctgcagtgag ctatgactgc tcccctgcac cccaggctgg
                                                                     1500
1554
<210> 15
<211> 1540
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (651)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (1124)
<223> n equals a,t,g, or c
<400> 15
agaattegge aegagggeat attaetttee taggaetgee acaacaaact attaccaact
                                                                       60
ageggettaa aacaacaaga gettatteet cacagttetg gaggeeagaa gteeaaaace
                                                                      120
aaggtgtcag gaaggtcatg ctctctccaa agtctccaag gatgctcctt ccttgcctcc
                                                                      180
tccagcctct ggtcgtggcc aacatcccga gggttccttg gcttgcagat gaatcactta
                                                                      240
atcccaccc catcatcaca tggcagtccc cctgtgtagc tcagctctgt ccaaatttcc
                                                                      300
cetttectae aaggacatta gteactggat tatgacacag eteatettaa etggattata
                                                                      360
tctgcaaaga ccctgttata tctgcaaaga cgagttaaca ttcacatgtt ccaggggaga
                                                                      420
tatgaatttt aaggggacag tattggaccc agtataggag ggcaggcagc agcgagggag
                                                                      480
ccagggaggg ctggcctgac ttgagcctgt ttgaaaagca tcatcctcct accaagactg
                                                                      540
ggggctgctg gttctgacaa ggtttgcagg atcagctggg atgatgggtt scamccaytc
                                                                      600
cttcgagyta cgttggaccc ctgggcccac ttacagcaag gagcttgccc ntycgtgtag
                                                                      660
ctctycgtca gtgtgggaaa atctgartga gccagagaag ggtgagattc cccctgcaga
                                                                      720
gcaggcagta ctgagcaaat ccaggatcca gaactccagt tctaatcctg gctcttgcct
                                                                      780
gctttcctgt gtgaccctgg ggaagtggtt ttccctctct gagactctcc ttccccatgt
                                                                      840
```

<400> 14

```
gagtcacaag ggctgggcct agctgacccc caaggccctt acatgagtgg atagttgcat
                                                                      900
tttaaacctg gtgctcccca ggataaggga gtcaacccca aggagactgg ggtttctcct
                                                                      960
gagcctggcc cctggggatg agcactcact gtggaaaaag ctggccactt cttagccctt
                                                                     1020
gtcatgggca gaaaacatgc ccctccagcc ccaccagcac caacacacag ccaagctcac
                                                                     1080
tgtttcattt ttagagagaa atcagggctt tcggtgcagc tgantgacac agacaagggg
                                                                     1140
cggggggaca tgaaagggag cgggcaagga cggaaattac acttctccta gcaacctggt
                                                                     1200
tetgcagete ctaggeetgg ggcegegtga tacatgeeat teccaattaa egggatgtta
                                                                     1260
aatatacccc ggctcagcct gccccatgct gagccccgcc tggggcagtg cagggagcca
                                                                     1320
tgtgatggtg tagagcactc tgcaacaccc catattcatg ttcccactcc tagggccccg
                                                                     1380
cteggtcccc aggaggccag agcggtcctg ccctctgcct gagcatggct cagctccagc
                                                                     1440
ctccacttgc cctcccctat gctggccagc tcgggggtct gcaggcagcc tgtggggcag
                                                                     1500
ggccagttgg ccaaactctc caagccagaa gcccctcgag
                                                                     1540
<210> 16
<211> 1057
<212> DNA
<213> Homo sapiens
<400> 16
tegacecacg egteegetga gattacaggt gtgagecace aggeteagee ceetaagatt
                                                                       60
tgaaacactt taaatggccc atggtagggt tcctgctagg ataaaacatt aagcggctgt
                                                                      120
taaaagaaat aaaaggagga cacgtctctg tgcactggtg tggacaaatc tccaagtcac
                                                                      180
tgcaaaatgg aaaaagtata agatgctctt tccctgaacc tcaagggtcc cgccctctc
                                                                      240
actttcaggt ctctggacct ctgactgaca ctgtgcctgc ccaggtccct gtatgcactg
                                                                      300
ccacagtgcc ctgggcccca tgtccacccc tgtcctgccc ttctctggga tagggctggc
                                                                      360
cttcctctgc ctctgcctgg ctgcatccat ggtcgatctc aagtgccttg gcatgaactc
                                                                      420
cactetectg cageetteaa teaaggaatg atggggatgt gtacatacce caceecacee
                                                                      480
cttggcaggg tgatgctgag gtgtggattt ttaacagttc ccaqactttc ccaqqaqqct
                                                                      540
tgggtttggg tgcccacagt gggagctggt gtgatatcat accttcqccq qccqcctttc
                                                                      600
cttcctgttc tctgtgcccc tactcccact ctagagctgc cccgtttctc tqttttcqtq
                                                                      660
aaagagetga ceetgtgetg ceteceacte teecaatgee eetgeeacte etgtgageet
                                                                      720
gctgctggtg aggtcggtgc tgacctctgt gttgctggat aatqaqtcat ctatctctqq
                                                                      780
aggagaagaa aggcaggtcc tccacagccc tgataaaatc tccaagtctc ccagtttcgg
                                                                      840
gtecetetee tgggatgeag acceaetgee tgeecagetg gtacgateca catgecetet
                                                                      900
tcttgggaat aggggcatgg gaaagtgact aaagatactg ttctggctgc tgtgttcact
                                                                      960
1020
aaaaaaaaa aaaaaaaaa aaaaaaaggg cggccgc
                                                                     1057
<210> 17
<211> 2080
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (145)
<223> n equals a,t,g, or c
<400> 17
aattcggcac gagaccttta gggtgcgcgg gtgcagtata tctcgcgctc tctccccttt
                                                                       60
ccccctcccc tttccccacc ccgggcgctc aggttggtct ggaccggaag cgaagatggc
                                                                      120
gacttetgge geggeetegg egganetggt gateggetgg tgeatatteg geetettaet
                                                                      180
actggctatt ttggcattct gctggatata tgttcgtaaa taccaaagtc ggcgggaaag
                                                                      240
tgaagttgtc tccaccataa cagcaatttt ttctctagca attgcactta tcacatcagc
                                                                      300
acttctacca gtggatatat ttttggtttc ttacatgaaa aatcaaaatg gtacatttaa
                                                                      360
ggactgggct aatgctaatg tcagcagaca gattgaggac actgtattat acggttacta
                                                                      420
tactttatat tetgttatat tgttetgtgt gttettetgg atceettttg tetaetteta
                                                                      480
ttatgaagaa aaggatgatg atgatactag taaatgtact caaattaaaa cggcactcaa
                                                                      540
```

```
gtatactttg ggatttgttg tgatttgtgc actgcttctt ttagttggtg cctttgttcc
                                                                      600
attqaatqtt cccaataaca aaaattctac aqaqtqqqaa aaaqtqaaqt ccctatttqa
                                                                      660
agaacttgga agtagtcatg gtttagctgc attgtcattt tctatcagtt ctctgacctt
                                                                      720
gattggaatg ttggcagcta taacttacac agcctatggc atgtctgcgt tacctttaaa
                                                                      780
tctgataaaa ggcactagaa gcgctgctta tgaacgtttg gaaaacactg aagacattga
                                                                      840
agaagtagaa caacacattc aaacgattaa atcaaaaagc aaagatggtc gacctttgcc
                                                                      900
agcaagggat aaacgcgcct taaaacaatt tgaagaaagg ttacgaacac ttaagaagag
                                                                      960
agagaggcat ttagaattca ttgaaaacag ctggtggaca aaattttgtg gcgctctgcg
                                                                     1020
tcccctgaag atcgtctggg gaatattttt catcttagtt gcattgctgt ttgtaatttc
                                                                     1080
totottottg toaaatttag ataaagotot toattoagot ggaatagatt otggtttoat
                                                                     1140
aatttttgga gctaacctga gtaatccact gaatatgctt ttgcctttac tacaaacagt
                                                                     1200
tttccctctt gattatattc ttataacaat tattattatg tactttattt ttacttcaat
                                                                     1260
ggcaggaatt cgaaatattg gcatatggtt cttttggatt agattatata aaatcagaag
                                                                     1320
aggtagaacc aggccccaag cactcctttt tctctgcatg atacttctgc ttattgtcct
                                                                     1380
tcacactagc tacatgattt atagtcttgc tccccaatat gttatgtatg gaagccaaaa
                                                                     1440
ttacttaata gagactaata taacttctga taatcataaa ggcaattcaa ccctttctgt
                                                                     1500
gccaaagaga tgtgatgcag awgctcctga agatcagtgt actgttaccc ggacatacct
                                                                     1560
attectteae aagttetggt tetteagtge tgettaetat tittggtaaet gggeetttet
                                                                     1620
tggggtattt ttgattggat taattgtatc ctgttgtaaa gggaagaaat cggttattga
                                                                     1680
aggagtagat gaagattcag acataagtga tgatgagccc tctgtctatt ctgcttgaca
                                                                     1740
gccttctgtc ttaaaggttt tataatgctg actgaatatc tgttatgcat ttttaaagta
                                                                     1800
ttaaactaac attaggattt gctaactagc tttcatcaaa aatgggagca tggctataag
                                                                     1860
acaactatat tttattatat gttttctgaa gtaacattgt atcatagatt aacattttaa
                                                                     1920
attaccataa tcatgctatg taaatataag actactggct ttgtgaggga atgtttgtgc
                                                                     1980
aaaatttttt cctctaatgt ataatagtgt taaattgatt aaaaatcttc cagaattaaa
                                                                     2040
aaaaaaaaa aaaaaaaaaa aaaaaaaaa gggcggccgc
                                                                     2080
<210> 18
<211> 602
<212> DNA
<213> Homo sapiens
<400> 18
aatteggeac agkttgtgtt tetmatgtte caggteegge caggetggea geteetgetg
                                                                       60
gtcatgtttt cctcatgtgc tgtttccaac cagctcttgg tctggtaccc agcaactgcc
                                                                      120
ttagcagaca acaaacctgt agcacctgac cgacgaatca gtgggcatgt gggcatcatc
                                                                      180
ttcagcatgt catacctgga aagcaaggga ttgctggcta cagyttcaga agaccgaagc
                                                                      240
gttcgtatct ggaaggtggg cgacctgcga gtgcctgggg gtcgggtgca gaatattggg
                                                                      300
cactgctttg ggcacagcgc ccgtgtgtgg caggtcaagc ttctagagaa ttaccttatc
                                                                      360
agtgcaggag aggattgtgt ctgcttggtg tggagccatg aaggtgagat cctccaggcc
                                                                      420
tttcggggac accaggatgt gtacccggtt gtagtaggag ctgaaatcca tgctgagctg
                                                                      480
taccaggaac ttgcatatct agagacagag actgagtcac tggcccatct ctttgctctt
                                                                      540
                                                                      600
602
aq
<210> 19
<211> 629
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (533)
<223> n equals a,t,g, or c
<400> 19
gcacactttg accacttgtg atgagcctta tttgggagca aggtcttcaa ctttgtggtt
                                                                       60
tttgtttgtt ttatttggtt ttctgcttct gcattagttc acttagggtg atggctttca
                                                                      120
```

```
gctgctycca tgttgcttgc tgcaaaggat atgattttgt ycttttttat ggctgtgtag
                                                                        180
tattccatgg tgtatatgga ccacattttc tttatccaat ccaccatata tgggcaccta
                                                                        240
ggttgattcc atgtctttgc tattgtgaat agcactgtga tgaacataga agtggattaa
                                                                        300
atttetttt ettgacagte teetaattta tgettgtaca tatattttte tetcatgeet
                                                                        360
tgaggttttt aaaagtcctc tcctctttct catggcaata cttttactaa agtacatttc
                                                                        420
ctgggaatcc ttagggttcc ccttattttg aataggctga atattttcat atgtttggtg
                                                                        480
atttttatct tttaatcctt taataggttt gaaagtctct cttgatatgg gtngctcaga
                                                                        540
taggetecat egtagagtet agaaateate etatgatttt tittitgeeea tieetaggtt
                                                                        600
                                                                        629
aaaaaaaaa aaaaaaaaaa aaactcgag
<210> 20
<211> 2067
<212> DNA
<213> Homo sapiens
<400> 20
aattcggcac gaggaaaaac aaaagttttt taaaacaata aaagttaaca gtcaataatg
                                                                         60
tgtttgtcgg caagaagccc tctgttaata atggtctaaa caaataagac attgtttttc
                                                                        120
tccaataaag aaatccagag gcaggcagta gctggctttg attcagcctc tgactgtcac
                                                                        180
tgtcagggcc ccaggcccca tgagcctttc gtctttcctg catgttggct tatcttctca
                                                                        240
tgcttgtgac ttcctggttg caacacggct gctgcaacac cagacatctt gcctgtcttc
                                                                        300
aaggcaggaa ggaggggaa actategeet accagetatt tttettaeet tageteetee
                                                                        360
atgtettgga teaaaageat etetttgaae eteteeetea ggeataeeet gaaatgetgt
                                                                        420
ggactttaac cttttttctg ttgcaaaggt cgctcacatc tccctggttg tttggtcttc
                                                                        480
tottccttgg ctctagtaac acagcagtct gttgcttcct aggacaactt ataatgggac
                                                                        540
ccaaagggga aagaggattt cccgggcctc caggaagatg tctttgtgga cccactatga
                                                                        600
atgtgaataa cccttcctac ggggaatctg tgtatgggcc cagttccccg cgagttcctg
                                                                        660
tggtaagget ttetgggaga agtetggggt ggttateegt gaggaeetet caeetgatee
                                                                        720
ttatggggct ttgtaaaatc ctttcagtaa aactaacttt ttttcacgac tctgagtaca
                                                                        780
ccctcattat aggaaattgg aaaatatgag aaaatcaaga ggaaaaccaa attgtccatt
                                                                        840
tgattgtgag tccattttgg ggtattttct ttgtcttatt aaaatctaac ttttatatgg
                                                                        900
ttgagattat attgtataaa aatgtacttt tggccgggca tggtggctta tgcctgtaat
                                                                        960
cccagcactt tgggaggcca aggtgggtgg attataaggt caggagttcg agatcagcct
                                                                       1020
qqccqataca qtqaaacccc atctctacta aaaaatatat ttaaaaaatt aqccqqqcqc
                                                                       1080
ggtggtgcac gcctgttgtc tcagctactt gggaggctga ggtgggagaa tcgcttgaac
                                                                       1140
ccaggaggcg gagattgcag tgagctgaga tagcaccact gcactccagc ctgggcaaca
                                                                       1200
qaqcqaqact ccqtctcaaa aaaaqttata ctttqktatc ttaqttqaaa tcctqccatq
                                                                       1260
tttccacact ctataaataa cattttaaac tttttattag ggaaaatttc aaatacatat
                                                                       1320
aaaagcagaa caaatagtgt aatgaacccc tgtgtaccct tcacccaact ttaataatga
                                                                       1380
tcaactcatg gcgagcctgt gtccttgttt tctctttatg cctactcact cctgcccatt
                                                                       1440
ctctgttgta ttattttgaa gtaaaccttg gacatctgtt catcataatc atccatctag
                                                                       1500
tgtggctgtg ctacaattta cttaaccagt gttggtgttt aaccaaccta ttgcttattg
                                                                       1560
gccacccca agetttttac taatgtaaat aatgctgtaa agaatatett tgagtaggat
                                                                       1620
aattttaaga atcacttcca gatgtcaaat tacttgacta tatgacattg ccttttaact
                                                                       1680
taagtettgg gaacgtttta aatatttaaa aatgttaaat eegaggeegg gegeggtgge
                                                                       1740
tcatgcctgt aatcccagaa ctttgggagg ccgaggtggg tggatcacct tgaggtcagg
                                                                       1800
agetegeaac cageetggee aacatggega aaccetatet etaetaaaaa tacaaaagtt
                                                                       1860
agccaggcat tgtggtgcac acctgtaatc ccacctactc gagaggctga ggcaggagaa
                                                                       1920
ttgcttgaac ccgggaggca gaggttgcaa tgagccgaga tcacgctact tcactccagc
                                                                       1980
ctgggcaacc gcgtgagact ccatctcaaa aacaaaagaa aaaaaaaaaw aaaaaaaccg
                                                                       2040
gcacgaggg gggcccgtac ccaatcg
                                                                       2067
```

<210> 21

<211> 997

<212> DNA

<213> Homo sapiens

```
<221> misc_feature
<222> (963)
<223> n equals a,t,g, or c
<400> 21
cccgactcta ggccggaagc gcgcggagac catgtagtga gaccctcgcg aggtctgaga
                                                                         60
gtcactggag ctaccagaag catcatgggg ccctggggag agccagagct cctggtgtgg
                                                                        120
cgccccgagg cggtagcttc agagcctcca gtgcctgtgg ggctggaggt gaagttgggg
                                                                        180
gccctggtgc tgctgctggt gctcaccctc ctctgcagcc tggtgcccat ctgtgtgctg
                                                                        240
cgccggccag gagctaacca tgaaggctca gcttcccgcc agaaagccct gagcctagta
                                                                        300
agctgtttcg cggggggcgt ctttttggcc acttgtctcc tggacctgct gcctgactac
                                                                        360
ctggctgcca tagatgaggc cctggcagcc ttgcacgtga cgctccagtt cccactgcaa
                                                                        420
gagttcatcc tggccatggg cttcttcctg gtcctggtga tggagcagat cacactggct
                                                                        480
tacaaggagc agtcagggcc gtcacctctg gaggaaacaa gggctctgct gggaacagtg
                                                                        540
aatggtgggc cgcagcattg gcatgatggg ccaggggtcc cacaggcgag tggagcccca
                                                                        600
gcaaccccct cagccttgcg tgcctgtgta ctggtgttct ccctggccct ccactccgtg
                                                                        660
ttcgagggc tggcggtagg gctgcagcga gaccgggctc gggccatgga gctgtgcctg
                                                                        720
getttgetge tecacaaggg cateetgget gteageetgt eeetgegget gttgeagage
                                                                        780
caccttaggg cacaggtggt ggctggctgt gggatcctct tctcatgcat gacacctcta
                                                                        840
ggcatcgggc tgggtgcagc tctggcagag tcggcaggac ctctgcacca gctggcccag
                                                                        900
tctgtgctag agggcatggc agctggcacc tttytytata tcacctttyt ggaaatcctg
                                                                        960
ctntttcatc ccaaatttaa gggggtttca agaagaa
                                                                        997
<210> 22
<211> 1383
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (556)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (562)
<223> n equals a,t,g, or c
<400> 22
ggtgcaaaga acatagaata ttttgaaaaa cataagactg aaaatacatt ctgagctcac
                                                                         60
ctttgcttga tagtttggct gaacataaaa atctagtttg gaaatctttt ttgcctagaa
                                                                        120
attttatgac attttcccca ttgtcttcta ccttctggtg gtcttccaga tttcactgtg
                                                                        180
aaatgctgtg gtttgtatct ttacttgtca cttttactqc acactcaqtt qaatactctc
                                                                        240
aatattaaag ctcatgccct ccagtttggg catattttga tgaatatttt gtgaaaattc
                                                                        300
cttgcctttt ccaacttcta gaagctgcct ctacactttg attctttggg ctctttcttt
                                                                        360
ttttctccac cttcaaagcc agcagcatag cacttccaaa tttctctctg cttctgccct
                                                                        420
agtactaata ttaagtgagg tctccttgtt tcaaagaaaa tggatgtcaa taaagcactq
                                                                        480
atgcatcage aaatagtttt aaactccctg gakgwatate tagtetteea gaatacetet
                                                                        540
cttctctact agagtntaga tntattcatt tactcatcay tcmatcattt aamaaacatt
                                                                        600
ttctaagaaa ctgctttgcc tttgggactg ccctaggywc tggaatataa tagtgagcat
                                                                        660
gacattgttt gaacttttaa agcagcttac agttaaatag gtgaaacaaa ccaatataca
                                                                        720
aggacttgcc atatataaca aatacttttg tagagctaag tatagaatgt aaaagaaagg
                                                                        780
aaatagctca gtcttggagg gggaaaggag atttctcagt gacctgggac acttgaaqaa
                                                                        840
taagtaggag tcatccaaac aaagaacagg caaagctatt gatatagcat gtacaaagac
                                                                        900
ccagaagtga aagaaggtat agtattttca gagaaattac tcatgtaatc tgagacttag
                                                                        960
acaagtagag acagagatga atctggagag gcaaagtaat gaaggacctt atgaattggg
                                                                      1020
tgaccataga atatactatc caaacctata cacttttgaa aatgaaagag atacccgggt
                                                                      1080
geagtggete atgeetgtaa teecageact ttgggaggee aageaagaea ggeegateat
                                                                      1140
ctgaggtcag gagtttgaga ccagcctgac caacatggtg aaaccccatc actactaaca
                                                                      1200
```

```
ttacaaaatt agccaggcat ggtagctcac acctgtattc ccagctactc aggaggctga
                                                                       1260
ggtagtagaa tcgcttgaac ccgggaagtg gaagttgtca gtgagccaag attgtgccat
                                                                       1320
tgcactctag cctgggtggc agagcgaaac tctgtctcaa aaaaaaaaa aaaaagggcg
                                                                       1380
                                                                       1383
<210> 23
<211> 1513
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1502)
<223> n equals a,t,g, or c
<220>
<221> misc_feature
<222> (1512)
<223> n equals a,t,g, or c
<400> 23
gcagaatgtt taaaggcctt aggtatatgg agcgagctgc tgaaastatg gcaaggtggt
                                                                         60
tgatctggcc ccactccatt tggatgcaag gatttcactt tctacccttc agcagcagct
                                                                        120
gggccagcct gagaaagctc tggaagctct ggaaccaatg tatgatccag atactttagc
                                                                        180
acaggatgca aatgctgcac agcrggaact gaagttattg cttcatcgtt ctactctgtt
                                                                        240
gttttcacaa ggcaaaatgt atggttatgt ggatacctta cttactatgt tagccatgct
                                                                        300
tttaaaggta gcaatgaatc gagcccaagt ttgtttgata tccagttcca agtctggaga
                                                                        360
gaggcatctt tatcttatta aagtatcgag agacaaaata tcagacagca atgaccaaga
                                                                        420
gtcagcaaat tgtgatgcaa aagcaatatt tgctgtgctc acaagcgtct tgacaaagga
                                                                        480
tgactggtgg aatcttctgt tgaaggccat atactcctta tgtgacctat cccgatttca
                                                                        540
agaggctgag ttgcttgtag attcctcatt ggaatattac tcattttatg atgacaggca
                                                                        600
aaaacqcaaa qaactaqaat actttqqtct qtctqctqca attctqqaca aaaatttcaq
                                                                        660
aaaggcatac aactatatca ggataatggt aatggaaaat gtcaataaac cccagctctg
                                                                        720
gaacattttc aatcaagtta ccatgcactc ccaagatgta cgacatcatc gcttctgtct
                                                                        780
ccgtttgatg ctgaaaaacc cagaaaatca tgccctatgt gtcttaaatg gacacaatgc
                                                                        840
atttgtatct ggtagtttta agcatgcgct tggacagtat gtgcaagcct ttcgcactca
                                                                        900
ccctgacgaa cctctctata gcttctgtat aggcctaacc tttattcata tggcatctca
                                                                        960
gaagtatgtg ttacggagac atgctcttat tgtacagggc ttttcctttc ttaatcgata
                                                                       1020
cctcagttta cgtgggccct gccaggaatc attctacaat ttgggccgtg gccttcatca
                                                                       1080
gttggggctg attcatcttg caatccacta ttatcagaag gccctggagc tccctccact
                                                                       1140
tgtggtagag ggtatagaac ttgaccagtt agacttacga agagatattg cctacaactt
                                                                       1200
gtctctcatc tatcagagca gtgggaatac cggaatggct caaacgcttt tgtataccta
                                                                       1260
ttgttctata taaagcaccg caactgagaa cagagcaatg gcagctgctg tgtgaggacc
                                                                       1320
agtgtcttct gtctcagggc ttattatttg taactccaaa atagaaatga caatttcaga
                                                                       1380
attacctaac aaacagtgta tttattttta atatgtgata atgatcttgt ggtatatatg
                                                                       1440
                                                                       1500
caaaattatt cctacaaaaa aaaaaaaaa aaactcgtag ggggggcccg gtacccaatc
cnaatttttc cnc
                                                                       1513
<210> 24
<211> 1044
<212> DNA
<213> Homo sapiens
<400> 24
ggattttcag agacaaaggt ccaagttagg agacgtaatt actcagtgct ttgaagggac
                                                                         60
atccaaggtg ctcactctta gccatagccg ttggtttcct ggatgctgac tgtgaagatt
                                                                        120
ctaaagtgct tcctagggtg ggcggtggtg gcaggaggcc ttggacggag tcaggccaga
                                                                        180
cccagcctcc tgtttaatag gctgagccca agcgtccctc agatgcgaat ccaacagcct
                                                                        240
```

```
tggtgagttg taagatttca tggaaacttt ccctgacttc tgtctccccc ttgctcccca
                                                                        300
ttacctggga aaggcagett tgtgggccat gtgtcccgga agggcctggg ctggctgtgg
                                                                        360
cccagtgctc aggaccagcc atcttggccc tcacagcgcc ctgcccagtt ggtgtaatat
                                                                        420
ttgtyttcaa gccattgttg gagcaggcag gcaaaggggg ctttctgagg atccaacgtg
                                                                        480
tgccagccac tgggatacaa agacaggcct ggttcctagc tgtggggctg ggaagggtat
                                                                        540
ctgacatcaa tggtggcacc tggcagagga cacacagaca acagcaggca gcatggactt
                                                                        600
ttatgtttgt agcttgagct ggttttaatt ggaagctctg tgatttacat aatcacttac
                                                                        660
aatctctgta aataaggaac tatttatgag gaattgtaaa tttcctctct cccccttctt
                                                                        720
accetgtetg tgatettgte tgtgatgeag taatgatatt ceaetetagg tteccatgat
                                                                        780
cagtggtgaa atatagtgat tttcacctgt gcttccattc tgaagttctg gaaagaagta
                                                                        840
ctggatggac tgaagtccag gacaacgtyc caaagaaagg cagagtccag gtaggcttgg
                                                                        900
aggaccaagc cctggatgag cactggaggg cagaggcctc agtgtccagc actgtgccct
                                                                        960
gcacatggaa agcccctacg tttgtggaat gaatgaataa taaaaatgtt ttcataagtg
                                                                       1020
aaaaaaaaa aaaaaaact cgag
                                                                       1044
<210> 25
<211> 2575
<212> DNA
<213> Homo sapiens
<400> 25
ccacgcgtcc gcgggcaccg gccgacatgg cggcagcggt ggcggctgcg ctggcgcgc
                                                                        60
ttttggcggc ctttctgctc ctcgcggccc aggtggcctg tgagtacggc atggtgcacg
                                                                        120
tggtctccca ggccgggggc cccgaaggca aagactactg catcctctac aacccgcagt
                                                                        180
gggcccatct tccgcacgac ctcagcaagg catctttcct gcagctgcgc aactggacgg
                                                                        240
cetecetget etgeteegea geegacetee eegeeegtgg etteageaac eagateeege
                                                                        300
tggtggcgcg ggggaactgc accttctatg agaaagtgag gctggcccag ggcagcggag
                                                                        360
cacgeggget geteategte ageagggaga ggetggteee eeeggggggt aataagaege
                                                                        420
agtatgatga gattggcatt cccgtggccc tgctcagcta caaagacatg ctggacatct
                                                                        480
tcacgcgttt cggccgcacg gtgagggcgg cgctgtatgc gcctaaggag ccggtgctgg
                                                                        540
actacaacat ggtcatcatc ttcatcatgg ctgtgggcac cgtcgccatc ggcggctact
                                                                        600
gggccgggag tcgggacgtg aagaaaaggt acatgaagca caagcgcgac gatgggcccg
                                                                        660
agaagcagga ggacgaggcg gtggacgtga cgccggtgat gacctgcgtg tttgtggtga
                                                                        720
tgtgctgctc catgctggtg ctgctctact acttctacga cctcctcgtg tgcgtggtca
                                                                        780
tegggatett etgeetggee teegeeaceg geetetaeag etgeetggeg eeetgtgtge
                                                                        840
ggcggctgcc cttcggcaag tgcaggatcc ccaacaacag cctgccctac ttccacaagc
                                                                        900
gcccgcaggc ccgtatgctg ctcctggcgc tcttctgcgt ggccgtcagc gtggtgtggg
                                                                        960
gcgtcttccg caacgaggac agtgggcctg ggtcctccag gatgccctgg gcatcgcctt
                                                                       1020
etgeetetae atgetgaaga ceateegtet geeeacette aaggeetgea egetgetget
                                                                       1080
gctggtgctg ttcctctacg acatcttctt cgtgttcatc acgcccttcc tgaccaagag
                                                                       1140
tgggagcagc atcatggtgg aggtggccac tgggccctcg gactcagcca cccgtgagaa
                                                                       1200
gctgcccatg gtcctgaagg tgcccaggct gaactcctca cctctggccc tgtgtgaccg
                                                                       1260
gcccttctcc ctcctgggtt tcggagacat tttggtgcca gggctgctgg tggcctactg
                                                                       1320
ccacaggttt gacatccagg tacagtcctc cagggtatac ttcgtggcct gcaccatcgc
                                                                       1380
ctatggcgtt ggcctccttg tgacattcgt ggcactggcc ctgatgcagc gtggccagcc
                                                                       1440
cgctctcctc tacctggtgc cctgcacgct ggtgacgagc tgcgctgtgg cgctctggcg
                                                                       1500
cegggagetg ggcgtgttet ggacgggcag eggetttgeg aaagteetae etceatetee
                                                                       1560
gtgggcccca gcaccagccg acggcccgca gcctcccaaa gactctgcca cgccactctc
                                                                       1620
eccgcagecg eccagegaag aaccagecae ateceeetgg ectgetgage agteeceaaa
                                                                       1680
atcacgcacg teegaggaga tgggggetgg ageceecatg egggageetg ggageecage
                                                                       1740
tgaatccgag ggccgggacc aggcccagcc gtccccggta acccagcctg gcgcctcggc
                                                                       1800
ctaggggagg ggtgagacgc tcgctgccgt gcccgccaca ccaagatgtt ggggctgcct
                                                                       1860
ggcgcccatg gagacagaca gacagacgct tgtcccccgg gaccgaggcc tgtgccgtcc
                                                                       1920
ccacccgccc caacatggtg cttatccttg ccgagacccc tgcagtcgtg cccgcgccca
                                                                       1980
gcccagctgc cccggctgca cgcctgctgc tcccagctcg cccggctgcc acaagctttc
                                                                       2040
tgcgggtcca tcctccccgc aggaggaggg gtccgtcctt cgcaggcctt gcccggcctc
                                                                       2100
tctgcagacc ctcaagcgtc gtctgcatga gtgagcaggc gtgggtggac tttggccgcg
                                                                       2160
gccacacttg gtgctcacca gctgcttcgg ccttcaggtg acctccctcc ccacggcatc
                                                                       2220
```

2280

ctgctctccg ggtggaagag cagctttttg tctcccagaa ggcatcgctt ttccctcttg

```
agcagategg agceetggg aggtttggaa getgeeteea agcetaggae aeggaeeggt
                                                                 2340
ggccggggcg gcctctggcc cctgacgctg gctgagacag gcccgtgggg cggggttttg
                                                                 2400
2460
gccctcagcc agaggtgcct ggccatgcct gcacactcct ccccatttta ataaatggtc
                                                                 2520
2575
<210> 26
<211> 718
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (21)
<223> n equals a,t,g, or c
<400> 26
aactagggat cccccgggct ncaggaattc gccactggrg ccaaagtgag agtccagcgg
                                                                   60
tettecageg ettgggecae ggeggeggee etgggageag aggtggageg accecattae
                                                                  120
gctaaagatg aaaggctggg gttggctggc cctgcttctg ggggccctgc tgggaaccgc
                                                                  180
ctgggctcgg aggagccagg atctccactg tggagcatgc agggctctgg tggatgaact
                                                                  240
agaatgggaa attgcccagg tggaccccaa gaagaccatt cagatgggat ctttccggat
                                                                  300
caatccagat ggcagccagt cagtggtgga ggtaactgtt actgttcccc caaacaaagt
                                                                  360
ageteactet ggetttggat gaaattegae tgettaaaaa ggaeettggt ttaatagaaa
                                                                  420
tgaagaaaac agactcagaa aaaagatttg gctctgtctc atttggaaga agctgcaggc
                                                                  480
ttattcccca tgcacttgct tcctggctgc aaaccttaat actttgtttc tgctgtagaa
                                                                  540
tttgttagca aacagggagt cctgatcagc acccttctcc acatccacat gactggtttt
                                                                  600
taatgtagca ctgtggtata catgcaaaca tccgttcaaa atctgagtcg gagctaaaaa
                                                                  660
aaaaaaaaa aaaactcraq ggqqqqcccg aqtacccaat tsqccctaqa aqaqqcqa
                                                                  718
<210> 27
<211> 654
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (613)
<223> n equals a,t,g, or c
<220>
<221> misc_feature
<222> (623)
<223> n equals a,t,g, or c
<400> 27
ggtcgaccca cgcgtccggt catggccatc cagagcctgc accettgccc ctcagagctc
                                                                   60
tgctgcaggg cctgcgtgas yttttaccac tgggcgatgg tggctgtgac gggcggcgtg
                                                                  120
ggcgtggccg ctgccctgtg tctctgtagc ctcctgctgt ggccgacccg cctgcgacgc
                                                                  180
tcccgaggcg gagaacaccg aacacccagt gaaggtgagg ggatcagcac ggcgccgcca
                                                                  240
ccgtgctgga acgagactca gccacaagga ggtgcgaagc tctgacccag gccacagtgc
                                                                  300
ggatgcacct tgaggatgtc acgctcagtg agagacacca gacacagaag ggtacgctgt
                                                                  360
gateceaett etatgaaatg teeaggaeag accaatecae agaateaggg agaggatteg
                                                                  420
                                                                  480
tgggtgccgg gactggggag ggggacctgg gggtgactag gtgacataat ggggacaggg
                                                                  540
ctgccttctg ggtgatgaga atgttctgga atcagatggg atggctgcac ggcgtggtga
                                                                  600
aggtactgaa cgccacctca ctgtaagacg gtagattttg tattttacca caataaacaa
                                                                  654
```

```
<210> 28
<211> 1445
<212> DNA
<213> Homo sapiens
<400> 28
ggcacgaggg atttgaacaa gatcattaga attcaaaaaa caccagaaat gaaagatctt
                                                                       60
tcctgaagct gtttaggaat attcatgata tacccttaac tgttctagag aacaaaatgc
                                                                      120
gtctgtgctc cttcacaaaa gtccctatga atttgtttct caatgtgatc cttcttaagt
                                                                      180
tctataactt tttgttttca ttaattttag gaaaatcctg ccttgcttcg ttgggcctat
                                                                      240
gcaagaacaa taaatgtcta tcctaatttc agacccactc ctaaaaactc actcatggga
                                                                      300
gctctgtgtg gatttgggcc cctcatcttc atttattata ttatcaaaac tgagagggta
                                                                      360
agtattcaga ccagatgttt agtatttgag tgataggttc actttctagg gaccagctgc
                                                                      420
ageteettet ettgaagatt gecaceagtg ecceteceae ettggggetg teetetgeet
                                                                      480
tcccttcctc tcttcttta tctttattcc tttccagcag gagttaaaac agaaagtttt
                                                                      540
cagtcacctt tgtctatttt tgttagttca tttgtttttt aaaaagatga tgtttattgg
                                                                      600
gttaagtatt agcagaatac ataaatcatt tagtacgttt cctgtttgcg tgaattctat
                                                                      660
ttatgttggt cacattttgc aaattaatgt taaaacctat taatactcta cgggacagag
                                                                      720
aagcacaagc tgcctgtgtg gggaatagct gccgtcagca gcctgggtat atgattggag
                                                                      780
agaaagtcaa gctgatcttt ggcaccaaac cattccacat ctggtactaa accctgagct
                                                                      840
gcagccccca ggcttgtgtt gccactggag cccactcgtc tagctttgtc tttaactggc
                                                                      900
ccatctgcat tcccattaga gttcgtgtat tttgattatc tggtgaatga tctacttaac
                                                                      960
agaaaggtag tccacatttt cccagaaagt gtttgcattt tgctttcaat atatggtttt
                                                                     1020
atgggataat atatttctaa tgactaaaat gtgagtaaga tgtttttgaa taggagcatt
                                                                     1080
ttettaetgt gtetttagtt eeteggatta etgtttette geacacteee tgggetttag
                                                                     1140
acagtgggat tgcaattagg tttggagtgt ttcattctgt ttgtcagttg tacggtgggt
                                                                     1200
tqtgccaaaa tqcaqttttt cttacctttt ttatttattt attttatct aatataqcca
                                                                     1260
actggcagaa tatattgtct ttaatgtact ttttttctgt ctttacagga taggaaagaa
                                                                     1320
aaacttatcc aggaaggaaa attqqatcqa acatttcacc tctcatatta agtctqqcaa
                                                                     1380
1440
aaaaa
                                                                     1445
<210> 29
<211> 2020
<212> DNA
<213> Homo sapiens
<400> 29
ccacgcgtcc ggggtgaggg caacagatgc tggacccagg gagctctctg ccacaggatg
                                                                       60
atggtggccc ttcgaggagc ttctgcattg ctggttctgt tccttgcagc ttttctgccc
                                                                      120
ccgccgcagt gtacccagga cccagccatg gtgcattaca tctaccagcg ctttcgagtc
                                                                      180
ttggagcaag ggctggaaaa atgtacccaa gcaacgaggg catacattca agaattccaa
                                                                      240
gagttctcaa aaaatatatc tgtcatgctg ggaagatgtc agacctacac aagtgagtac
                                                                      300
aagagtgcag tgggtaactt ggcactgaga gttgaacgtg cccaacggga gattgactac
                                                                      360
atacaatacc ttcgagaggc tgacgagtgc atcgaatcag aggacaagac actggcagaa
                                                                      420
                                                                      480
atgttgctcc aagaagctga agaagagaaa aagatccgga ctctgctgaa tgcaagctgt
gacaacatgc tgatgggcat aaagtctttg aaaatagtga agaagatgat ggacacacat
                                                                      540
ggctcttgga tgaaagatgc tgtctataac tctccaaagg tgtacttatt aattggatcc
                                                                      600
agaaacaaca ctgtttggga atttgcaaac atacgggcat tcatggagga taacaccaag
                                                                      660
ccagctcccc ggaagcaaat cctaacactt tcctggcagg gaacaggcca agtgatctac
                                                                      720
aaaggttttc tattttttca taaccaagca acttctaatg agataatcaa atataacctg
                                                                      780
cagaagagga ctgtggaaga tcgaatgctg ctcccaggag gggtaggccg agcattggtt
                                                                      840
taccagcact ccccctcaac ttacattgac ctggctgtgg atgagcatgg gctctgggcc
                                                                      900
atccactctg ggccaggcac ccatagccat ttggttctca caaagattga gccgggcaca
                                                                      960
ctgggagtgg agcattcatg ggatacccca tgcagaagcc aggatgctga agcctcattc
                                                                     1020
ctcttgtgtg gggttctcta tgtggtctac agtactgggg gccagggccc tcatcgcatc
                                                                     1080
acctgcatct atgatccact gggcactatc agtgaggagg acttgcccaa cttgttcttc
                                                                     1140
cccaagagac caagaagtca ctccatgatc cattacaacc ccagagataa gcagctctat
                                                                     1200
```

```
gcctggaatg aaggaaacca gatcatttac aaactacaga caaagagaaa gctgactctg
                                                                     1260
aagtaatgca ttacagctgt gagaaagagc actgtggctt tggcagctgt tctacaggac
                                                                     1320
agtgaggcta tagccccttc acaatatagt atccctctaa tcacacacag gaagagtgtg
                                                                     1380
tagaagtgga aatacgtatg cctcctttcc caaatgtcac tgccttaggt atcttccaag
                                                                     1440
agcttagatg agagcatatc atcaggaaag tttcaacaat gtccattact cccccaaacc
                                                                     1500
tectggetet caaggatgae cacattetga tacageetae tteaageett ttgttttaet
                                                                     1560
gctccccagc atttactgta actctgccat cttccctccc acaattagag ttgtatgcca
                                                                     1620
gcccctaata ttcaccactg gcttttctct cccctggcct ttgctgaagc tcttccctct
                                                                     1680
ttttcaaatg tctattgata ttctcccatt ttcactgccc aactaaaata ctattaatat
                                                                     1740
ttetttettt tettteettt tttttgagae aaggteteae tatgttgeee aggetggtet
                                                                     1800
caaactccag agctcaagag atcctcctgc ctcagcctcc taagtacctg ggattacagg
                                                                     1860
catgtgccac cacacctggc ttaaaatact atttcttatt gaggtttaac ctctatttcc
                                                                     1920
cctagccctg tccttccact aagcttggta gatgtaataa taaagtgaaa atattaacat
                                                                     1980
2020
<210> 30
<211> 1083
<212> DNA
<213> Homo sapiens
<400> 30
aatteggeag ageeetgaac eeegeaceee accetegagg eeagaaateg gttgeetetg
                                                                       60
gggacctgag aagcgagacc actcggcgcc ctgacttgca aagttggggt ctttattggc
                                                                      120
ctccgggatt ctgctcctgg cggtttctcc aggctggtga tgggcaagcc gggtgtacca
                                                                      180
agtccaggat gcacatgagg agcgtttgta gcagtcactg aatcacctca tgactagcgg
                                                                      240
ggcaggcctc taattcaccg caggatttcc ggtaggttgg attgtggggt tggtgtttgc
                                                                      300
actecaaaga gktgetgtga ttteeetgta tetqtettte tqqettqtta qatettetea
                                                                      360
tttggcgtcc tttctccgaa gagttaacca agacqtttgg catggtttcc ttqctttcct
                                                                      420
cctatctttt gctgctagag ctgctttcga aaagaagtct tttcttqcaq tgqtatcttt
                                                                      480
tetttgggtt acagtgttgt teatcettte tttgeegaaa qaatqaatce cagtgettea
                                                                      540
caaggttaaa ggaaagatct gctggtagtg tttagtcttt gttctgagct gatatgtgtt
                                                                      600
agtagetttt tgtttttaaa ttttattagt aaaattteae cagtgaacca gaagetettt
                                                                      660
ttttctgttg tgaaatgcta gctttaagat ttctgagaac tttgtgtcaa agaaatcttt
                                                                      720
gaaaagttac tgaagtatac agagaggttc acaattttaa atgtgcaggt ggtccgggcg
                                                                      780
cggtagatca cacctgtaat cccagcactt tgggacgcca aggtgggcgg atcacttgag
                                                                      840
cccaggattt ccagaccagc ctgggcaacg tgccaaaacc ctatctctac taaaattaca
                                                                      900
aaagttagct gtgtgtggtg gtgtgtgcct gtagtcccag ctacctggta ggctgaggtg
                                                                      960
ggaggatcac cagagcccag gaggttgaga ttgcagtgag ccgtgatcat ggcagtgcac
                                                                     1020
tcccgcctgg gtggcagagt gagaccctgt ctccaaaaaa aaaaaaaaa aaaaaaactc
                                                                     1080
gag
                                                                     1083
<210> 31
<211> 1580
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1513)
<223> n equals a,t,g, or c
<220>
<221> misc_feature
<222> (1542)
<223> n equals a,t,g, or c
<400> 31
gctggggaag atgctgcgtc cagcgttacc gtggctgtac cttggcctct gcagcctcct
                                                                       60
```

```
qqtgggggag gcagaggccc cgagccccgt ggatccgctq gagcqgaqcc ggccqtacqc
                                                                        120
ggtgctgcga gggcagaacc tggtgttgat gggaaccatt ttcaqcatcc tgctqqtqac
                                                                        180
tgtcatcctt atggcatttt gtgtctacaa gcccattcgg cgtcggtgac agccagacaa
                                                                        240
gttcttcaat gagtatttgg gaataggata agttgtgttg cacacaggcc agtggagaag
                                                                        300
ttggaaccaa aactttccta cttggaaatg acctttggtc tggacagttg gtaaatgcta
                                                                        360
aatgaattag aagaaaacat gtactagaca ttattttttc ctaacactgt agcgcaaata
                                                                        420
attggcccct gagtccgctt ctcagtgttt ctgactgtac ttgttaaaag taagacctga
                                                                        480
aagctccaaa ggtcagtgta aagatggagt gttcatgaga aagaaaacat ggtaaccttg
                                                                        540
tgagtgcctg taagaaccac actgtaaaga actcatcatt aatqcttqaa aatqttatta
                                                                        600
agaaggagac ttaccatgca gacattccct atttaagaac catttgqtta caqtqqqtta
                                                                        660
agaatcacag atttttttt ttaatctcac ctgaqttaqc ctaqaatqcq ctqqttqcaa
                                                                        720
agtggtgtca gctgtgggga tcttgggccc tcgttcctca cctqcatcct qccctqcact
                                                                        780
caggtgctcc ccctgaagtc agggtcacat caggtagacc tgttactata tgcacctttq
                                                                        840
gcctggaatg ctctgaagtt ggactggaaa tgttactagg ttggcctgtt acaaaaagga
                                                                        900
ccccatcctg cttaaacaca ttgatctccc ttgccctgca tttgagtctt tctagcccac
                                                                        960
ggtctgaaac ttgaggcagc tttccagatt tggaatgtaa aaggctcagt gggcactctg
                                                                       1020
ttcatccctg ggtggggagg gcccagccaa cagaagtgca tgtccactgt gcgggccagt
                                                                       1080
gtgtgtttac acaaatttca tctcagcttt gaaaatgctg ctattagttt ccactgttgg
                                                                       1140
tgaactggat tttttcctcc tattgaaatg atactttcat acttataaag ctgtcgtcaa
                                                                       1200
tatttatttc aaggtgctag atttaatttt gttattaaat tgaaatgctt atcttgtgtt
                                                                       1260
caagcacagc actgatttta acaacctgca tttaatgtga agtaaccgaa gtaggatact
                                                                       1320
gtaactgtgt aaggattttg tttgtaatct tgtaacattg aaccattgaa atgttcagtt
                                                                       1380
ctttgctttt gagcaaaacg tcaattaaaa ctaaagtaaa atcctatata ttgttttact
                                                                      1440
ccaccagtta tttcccaagt gtttgaaatg caggtgtgtg tctgaatttg gatctaatcc
                                                                      1500
acttaaagga ggnctgtgga ggggaaattc cttttttgag gncgggtttt gggtcccctt
                                                                      1560
gcccggggaa agggttcccg
                                                                      1580
<210> 32
<211> 796
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (748)
<223> n equals a,t,g, or c
<400> 32
teggeeegag aagaaatgtg aegeactete accaagatge tgaagetgae atteateaat
                                                                         60
aagcagctgt gcatccacta ggcatttggt aaatgttaac ttatctaccg aggtggtgtt
                                                                        120
ttcttagcct cccacctcct tgctgtggag cagcttcatg taccatgatg catattcaga
                                                                        180
tcattcttaa tactcatatt ttgatagaga ggtttttagg ttttctttta aaccaagttt
                                                                        240
attgagataa actactttqg taggatatqq aacttaqqaa taatqqtatq aaactaqaca
                                                                        300
gctttttttt ttttattaca ctttaagttc tgggatatgt gttcagaaca tgcaggtttg
                                                                        360
ttacataggt atacacgtgc catggtggtt tgctgcaccc atcaacctgt catctgtatt
                                                                        420
cggtgtttct cctaattcta tcccwccct accccctgc ccccaaaaag gccccagtgt
                                                                        480
gtgatggtcc cctccctgtg tccatgtgtt ctcattgttc aactcccact tatgagtgag
                                                                        540
aacatgaggt gtttggtttt ttcttcctgt gttagtttgc tgagaatgat ggcttccagc
                                                                        600
ttcatccatg tccctkcaaa ggacatgaac tcagtccttt tttatggctg catagtattt
                                                                        660
cgtggtatat aagtgccaca ttttctttat ycagtctayc atttgggttg gttccaaatc
                                                                        720
tttgctattg tgaatagtgc cgcaatanac atacgtgtgc atgtgtcttt aaaaaaaaaa
                                                                        780
aaaaaaaaa ctcgag
                                                                        796
<210> 33
<211> 1256
<212> DNA
```

<213> Homo sapiens

```
<400> 33
ctatgttcca tcattccttc ccaaagccac cggaagcatt ccttctagga aaggtggagt
                                                                       60
cggtagtgag aagccggagg tgcccctaca gacatacaag gagattgttc actgctgyga
                                                                      120
ggagcaggtc ttaactctgg ccactgaaca gacctatgct gtggagggtg agacacccat
                                                                      180
caaccgcctg tccctgctgc tctctggccg ggttcgtgtg agccaggatg ggcagtttct
                                                                      240
gcactacate tttccatace agttcatgga ctctcctgag tgggaatcac tacagccttc
                                                                      300
tgaggagggg gtgttccagg tcactctgac tgctgagacc tcatgtagct acatttcctg
                                                                      360
gccccggaaa agtctccatc ttcttctgac caaagagcga tacatctcct gcctcttctc
                                                                      420
ggctctgctg ggatatgaca tctcggagaa gctctacact ctcaatgaca agctctttgc
                                                                      480
taagtttggg ctgcgctttg acatccgcct tcccagcctc taccatgtcc tgggtcccac
                                                                      540
tgctgcagat gctggaccag agtccgagaa gggtgatgag gaagtctgtg agccagctgt
                                                                      600
gtcccctcct caggccacac ccacctctct ccagcaaaca cccccttgtt ctacccctcc
                                                                      660
agctaccacc aactttcctg cacctcctac ccgggccagg ttgtccaggc cagacagtgg
                                                                      720
catactggct tctagaattc ctctccagag ctactctcaa gttatatcca ggggacaggc
                                                                      780
ccctttggct ccaacccaca cgcctgaact ttaaggatca ttggactatc ttctctgtgg
                                                                      840
ccagcgcagc tctcttctgt gttcacagaa tggccactga taggcaygcc tcttttccca
                                                                      900
cccactggaa ggctcacagg caaggtgaga gaggacacag aaggtgccaa cactgtcgct
                                                                      960
acagtaagga cctgaagtga ctttgagaaa ttcaccctca caaaccttcc ttcaggagca
                                                                     1020
ggcattggta gtgcagaggc acagattccg tcctttacca gctgcagaat cttgggcaag
                                                                     1080
                                                                     1140
ttacatagcc tctgtgagcc tcatcggtaa acagtggggg ttatgaaacc cacctcacag
qqttqttqtq aqqatccaat qaqttqattt aqqtaaqcac ctaqcacatq ccqtqqcacc
                                                                     1200
1256
<210> 34
<211> 1064
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (462)
<223> n equals a,t,q, or c
<220>
<221> misc_feature
<222> (1047)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (1048)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (1050)
<223> n equals a,t,g, or c
<400> 34
cttcagcctg ggcaacagag caagaacctg tctcagtcaa tcaataaatg tatgtatata
                                                                       60
tatatatgta tatatgtcag accaccgtct gaaattgctg ttcatgattg gaaatcgaac
                                                                      120
tggaaacccg aaggcaggag atgtgtgctc ccttgggatg tatggggaaa tcacacagag
                                                                      180
etgttagtac ttcagtcatg ggatttgctc tcatgctatg catatgggcc tcacaacttg
                                                                      240
taaatgccac tggaagatgg cttatctaag gttccttatt ttgtggtctt tcccccttag
                                                                      300
ttctgcagtg agtggggcaa agcgtgtcac tgaccttttg aatggaaaac actggaagcc
                                                                      360
ttagcgttct taattcctga aatgttcatt tttwcttcta agcaactggg cttcasagga
                                                                      420
gattagggca ggcaataaca gtgttgacac cagggcaact gntttcycct gttatgggat
                                                                      480
tatwcaacat ctgctttctg ctaagctcca tggaaggcac agaggaaaca cagcagagtc
                                                                      540
catgccttag agactttgta cctgatgaat tgagtggtat caggacaatg ctatttaatg
                                                                      600
```

```
tttgatccat cccttctcta agcacatctc agatttctgt gctacctgat ttaacccttt
                                                                        660
caqttcatag aacccaqaaq qataaqqtqa aaaqataqac cggqaaaaqt aatqcaaqtq
                                                                        720
gccaagagta gcttccactt caaagttcct catgtgtgtg tgctaacatt gtgacttctg
                                                                        780
ttcagtcatt gtcagtataa actgtacatt ggaatcattt gtagcttttt aaaaaatgcc
                                                                        840
tatgecteae ectagaecta ecacateaaa ateteaggat agagteteaa getaaaaage
                                                                        900
ctctatttga gccaggctta ttggcacctg cctgtagtcc cgtactcaga aggctgaagt
                                                                        960
gagaggatcg cttgaactca ggagtttaac gccagcagag gcaatagggc aaaatagcga
                                                                       1020
gatctcatct ctttaaaaaa aaaaaanntn aaaagggcgg ccgc
                                                                       1064
<210> 35
<211> 755
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (733)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (734)
<223> n equals a,t,g, or c
<400> 35
natttcccgt tcagttattc cggtgacact atagaaggta cgcctgcagg taccggtccg
                                                                         60
quatteceqq qtequeecae qcqtecquae teetquaaca qtqqqqacat etcacqqaee
                                                                        120
agacaggagc tggggctctg catctcacag cggtgcctgt cagacaggaa gaagtcccgc
                                                                        180
agaagtggcg tgtgggtcag ggcctgcacg atgcagttca tgaagcatqt gttcccaaqq
                                                                        240
ttgatcagcc cacgcagacc tatggtgcag ttcgaggtga tctttctcct tttcgggttg
                                                                        300
tgcttcagca gttcaagctc ccgtttggtt ggttcccaag ttgaaaactt ctctccaacg
                                                                        360
ccttgcattt tccaagcttt tcgctgctcc tccttggcga ttatttccat gtctttgtca
                                                                        420
tagatgtagt cctggcacag aaaacagtag atgcctccgt acatcagatc aatggccagg
                                                                        480
ttgtgccgct tcgccttcgc atgctcgtga atatgcttct ttgtgaaaca gccgaagaag
                                                                        540
acacagtaga ggcaggaatg cagcctgttg aggtggacgc cacagacatg gcagatacag
                                                                        600
gacttggcct tgcgcttgcg ggcctcagcc gtgccgctcc acacgaagca ctggtagatg
                                                                        660
gcccgcaggt tctgcttcca gttgtccacc ttgaagctgc ccaggtgcga gcagcccggc
                                                                        720
ggcgctaccg ccnnctcqqc gtccatgqcc tcqcc
                                                                        755
<210> 36
<211> 604
<212> DNA
<213> Homo sapiens
<400> 36
ggcctcccaa agtgctggga ttacaggcgt gagcaagatt atatttcttt aataaagaat
                                                                         60
acgtgacttt tatttaagtt gtcagattta ttggaaatgt tgttcgtaat atcttttgat
                                                                        120
gtctgtggta cctgtaatga ttcctttttt actactactg tttttttct ctctctttc
                                                                        180
cacccaccat ccccatttac tttattttc catctttata ttttcagget ctttattggt
                                                                        240
cagaattctt agttgtagaa aagagagttc acaccaggta ctcttaagca gaaaatgttt
                                                                        300
tattaagggg cacagacagc acagacagct tacaaaagtg taggggaccc aaacagaaac
                                                                        360
cetttaattt taetgattag aatggggage teaacagagg caactattaa aatgtgcaga
                                                                        420
aggtattcag aagattgtga gcaggcatat atgagagatt tcattacaag ctctctacag
                                                                        480
```

```
taaccaacca taatgcagaa tagaaattca ttattttgga cttttgctac ctgtcaattt
                                                                        540
aactgttacg tttttacgga cttgttaaaa aagtgattag atagactgtt ttagattttc
                                                                        600
ctta
                                                                        604
<210> 37
<211> 812
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (17)
<223> n equals a,t,g, or c
<220>
<221> misc_feature
<222> (108)
<223> n equals a,t,g, or c
<400> 37
gaccattttt agccaanctt ggaattaacc ctcacttaag ggaacaaaag ctggagcttc
                                                                         60
caccgcgttg gcggccgctc tagaactagt ggatcccccg ggctgcanga attcggccac
                                                                        120
qaqaqqactt ccccacctca tgcagctatt tgggccgtgg cgtctgaaat ttattatttc
                                                                        180
agagtcaccc ctttratgac cttggcagtg ractgcagtc atctgtttag gcctttccat
                                                                        240
ggcccacgtc aatgccgtta tttctgtttg ttgcacattt gatttccttg ttgttggcat
                                                                        300
ttagaaggcc ccctgcttcc cagatcacac cacgggcatg gaccacagag attgcatctt
                                                                        360
gtgagtctgt agaaatggtc aaggccttgt cctctcttag gtccagagct caggtgaatg
                                                                        420
cagattttcc cggccatctg tgctgaagtc cctgtgggga ggctcctggc tggtttcctg
                                                                        480
taggtagaca gctacacgtc ctgcccttca ttggcttctt ttcatgaaqc tcctqccatc
                                                                        540
tacaaaacat qtctcccttc ttqaatcaca tctctqttat tqaaqctctq qaaqtcaacc
                                                                        600
gggcgtggtg gctatgccta taatcccagc attttgggat gccggggcgg gtggatcacc
                                                                        660
tqaqqtcaqq aqttcqqqac caqcctqqcc aacatqqcqa aaccccqtct ctaatacaaq
                                                                        720
tgcaaaaatt ggccaggcgt ggtggtcact gtgctccagc ctgggtgaca gagcgagctc
                                                                        780
cgtctcaaaa aaaaaaaaaa aaaaaactcg ag
                                                                        812
<210> 38
<211> 1149
<212> DNA
<213> Homo sapiens
<400> 38
gtaaaagtta aaaatgtttg ccttttatgt tcaqgtttta aatcaatcta aaaqtatttt
                                                                         60
                                                                        120
tgtatacagt aggaatctaa ttttttttat ccatatgata gtcagttggc cctcctttct
tcagttacct gcagtgcatc aatgtcatca gtcaagtgtc catatatgtg gtgtttctgg
                                                                        180
gcttttcccc tcttccaatt atcagtgttt atccctgtgt caaaatcaca cagtattaat
                                                                        240
tattacaact ttatagtaag tcttaatatt tagtagggca agtcttttta tttgataaga
                                                                        300
gtatctttgc tattctttta cttttactct tctgcatata ttttagaatc agcctgtcaa
                                                                        360
attcctcaaa agactgtttg gataaatttg gaattacatt caatatagat caatttggga
                                                                        420
ataaccaaga gttttgggat attgagtctt cattcattaa catagctttt ctcttcattt
                                                                        480
atttaggtct tatttttca tagagcttta aaaggtttac tataaaatct ttaaggggta
                                                                        540
aactettgaa taaggteeag agttaaatag tggagagtta caggtgtetg tttgccccaa
                                                                        600
acagactgat ggtatttcag ccatctcagg atttggggaa gtcagcacaa ggatcaaaag
                                                                        660
actgagaaag tttaacttct cctctaggat gtttttagta cacacattat atttataagg
                                                                        720
aaacatattg taaataatag agtgataatg gccacttacc tgagccttat tataaacaga
                                                                        780
aacaaatatc caaccaatgc catagagcag aagtacagcc tgaaaccaag aagaaaaaga
                                                                        840
gcaattaaat caggatetea tetaggeeaa gettgaaaag gaagettatt teetatttgt
                                                                        900
cttctgccta atgaatgtgt cattactggg gaccttacca ataaaggtgc ttggatacat
                                                                        960
tttccagcac agaaacttaa tttgcaggaa catgatcttt acttgtaaaa ggatacattc
                                                                       1020
```

```
ttaatteggg atggttattt gagetgattt teaaggeatt tatttttaat ttatttqtea
                                                                  1080
1140
aaactcgag
                                                                  1149
<210> 39
<211> 1087
<212> DNA
<213> Homo sapiens
<400> 39
gcccactgga aatgatettg tttatgtgtt teettgttta etgtetgtet teagtagaat
                                                                    60
ggaagagcca tcggtatttt gtcttttttt ccccttgtcc attcttatat cctcagcttc
                                                                   120
tagaacattc cctggaacac agcaagtgtt cagtattgtt catggagtga cagatgtctc
                                                                   180
agccaagaag gtacaatcac agggaagaat gacttcaact ggtcttgact tcaacctgct
                                                                   240
tocagectgg tteeettete ceaceteeet acageceaca gaagatettt tecaaactgg
                                                                   300
aagtetgtee aggteattet tetgetetaa ggettteagt ageteeecet tateeecagg
                                                                   360
aggaagtcca aatgccttaa caagtgtcaa ggaacacttg gtgagccctg ctttccttgc
                                                                   420
tagtcactcg tgcacagctg agtctttccc cagagtggat gtcattcatg ctgttcccat
                                                                   480
540
ttttttttt ttttgagack gagtctcgat ctatcaccca cgctggagyg cagaggttgc
                                                                   600
tgtgagctga ggtggtgcta gtgccctcca gcctggatga cagagtgaga ctcggtctca
                                                                   660
ataaataaat aaataataaa gaagaaacca accettttga ceeeggggte teagactttt
                                                                   720
agccaccaca tcagcgagtt atggtgtttg ttatagcagc tctqqgaaac taatqcatqt
                                                                   780
tttcagtgac attttagccc cttctgaatg gtctggatgg ctggttgaca gctaagttca
                                                                   840
gacccgatgc aaaagcgcag tctatgtagg aatgtcccct gtggacagct gctgtgtagc
                                                                   900
caaggtgggt tacatactag gaaagggccc tgggggcccc cacagggagc taactctatt
                                                                   960
gacgggggac ccaggtaaca gatgcaggca tttgctgtga gtcacaagac actgatgtgt
                                                                  1020
gtttgcttgc ctgggcaaca tagtgagacc ccgtctctat taaaaaaaaa aaaaaaaaa
                                                                  1080
actcqaq
                                                                  1087
<210> 40
<211> 1276
<212> DNA
<213> Homo sapiens
<400> 40
gtgagtgtgt ggcactggtg gcctggagcc aaatttagct tgggtgagag ttgacaatgg
                                                                    60
tagttttcct tcctcaagcc cctctgtgcc cctagagcac cctggctgtg gctgcctcct
                                                                   120
tcatccaaga gcagagtcca tgttgggcca ggagacttca gatccatgtc ctggtgctgc
                                                                   180
ctctggcttt gtctttcctc agtgggcagg actgggtctg ctggtccatc tttacccttc
                                                                   240
tetgagetat geageettgg cetgetgegt eteeggeetg tattetetee cetteaetea
                                                                   300
ggccctggga aaccagccca gtttctkgca ggagaggcag aggaggtcaa tgcctttgct
                                                                   360
ctgggcttcc tgagcaccag cagtggtgtc tctggagaag atgaagtaga gcccttacac
                                                                   420
gatggagttg aagaggcaga gaaaaagatg gaagaagaag gtgtgagtgt gagtgaaatg
                                                                   480
gaggcaacag gagcacaagg acccagcagg gtagaagagg ctgagggaca cacagaggtg
                                                                   540
acagaagcag agggatccca ggggactgct gaggctgacg ggccaggagc atcttcaggg
                                                                   600
gatgaggatg cctctggcag ggcagcaagt ccagagtcgg cctccagcac ccctgagtct
                                                                   660
ctccaggcca ggcgacatca tcagtttctt gagccagccc cagcgcctgg tgctgcagtc
                                                                   720
ttatetteag ageetgeaga geetetgttg gteaggeate eeectaggee eeggaceaee
                                                                   780
ggccccaggc cccggcaaga tccccacaag gctggactga gccactatgt gaaactcttt
                                                                   840
agcttctatg ccaagatgcc catggagagg aaggctcttg agatggtgga gaagtgccta
                                                                   900
gataaatatt tccagcatct ttgtgatgat ctggaggtat ttgctgctca tgctggccgc
                                                                   960
aagactgtga agccagagga cctggagctg ctgatgcggc ggcagggcct ggtcactgac
                                                                  1020
caagteteac tgcacgtgct agtggagcgg cacctgcccc tggagtaccg gcagctgctc
                                                                  1080
atcccctgtg catacagtgg caactctgtc ttccctgccc agtagtggcc aggettcaac
                                                                  1140
actiticety teccaecty gyactetty ceccaeatat tietecayet etectecea
                                                                  1200
1260
attgggggg ggcccc
                                                                  1276
```

```
<210> 41
<211> 2083
<212> DNA
<213> Homo sapiens
<400> 41
gccctttacc cccaacccca ggccactggg cccttcccac accacttggg gagctgagaa
                                                                       60
gaggaggctg gagtaaggga ggacttgatc atccaagaaa tactttttat tgctgggagt
                                                                      120
cttctgaacc tcaccaaact gaggccagag ctgagctcct gggggagtta attcagaggg
                                                                      180
gagaggccag cacctccctc ctccatygct cgctgtgtgc cttaaactcc atctcatgtc
                                                                      240
cctccccatc ccctggcttt ccctccctcc ttgccccatc ctgggccagc cagcagggct
                                                                      300
cctcctctgg ctcttcagac ctttcagcca gtgctgtcag tgcccctggg agggaagggc
                                                                      360
atccctgagg cacccgaatg gtccctcagg gtgcagggag gcagaagcct ggccacagag
                                                                      420
gagcetecta aggeageage tgeageaage geaccetete eccaetetee ecaegeeaga
                                                                      480
geggetteca gageagatge tgtttecate etectegtea aaaccattet egetgetgag
                                                                      540
cttgacaatc tgggcaaggc ttgtggggcg cttgacaaac agaatctgcc ctgtgccgcc
                                                                      600
tggttccgtg gcctccagca tgagcctgca ggcagggcgc tgcgggaacc cagttgtgct
                                                                      660
geoceageee atgeeteegg gtetgetgtg catgaatgag tgeteacttg teeegggttt
                                                                      720
aggacgtggt caagtgaaca gcagggtcta actgtgctta cttagcccag ttcaaacaga
                                                                      780
acaaaggaaa aatatagaaa gcaacatctg ttgatcattt aggttttttt ttaaaccacc
                                                                      840
atgtcacttt gagtccttca tgggtttttg aacagcattt atcaagaaga aaatgtgggc
                                                                      900
tttttcccct ctcccgtgtt ttgtttgtcc tgtagataga gggaggaaag ccgtgcagtg
                                                                      960
gcaggcggga ccccctctgg tggcgggacc ccctcttgcg gtggtcttgc ggggccagcc
                                                                     1020
gggacctgtc actttattat ttaaggagtg tgtgtgtaga gtcgctggct tattaacagt
                                                                     1080
attgtgtgtg ggttgggttt ttagtttgtt ccttcttttt gaagtccctt catttcaatc
                                                                     1140
ettgactete teteccette cettgeccag etetgttgaa tgetgetgtg egegtgtgag
                                                                     1200
ggccgctctg cacacagggc ccttgggttg tgtgaactga aattctccct gtatttgtga
                                                                     1260
gactegeagg agtececate tgtageacag geaatgeeag tgeeatgetg eageeteaga
                                                                     1320
aaccaggeet eteactecag cagcaggeag aaccgtgtet gtggtegggt getgtecaca
                                                                     1380
getetgtetg cettgttett gggettgage tggatagagg tggggtetet teacetteee
                                                                     1440
                                                                     1500
tgaattcaga acagaccetg tgcctggccc cagtgtgccc aggcaattcc ccaggccctc
attgggagcc cttggtgttc tgagcagcag ggcccaggca gcacatgagc agtgcccagg
                                                                     1560
ggctccctgc gtgaggacgg caaggtgcga tgtatgtcta acttattgat ggcaggcagc
                                                                     1620
cccctgtgcc ccctaagcct ggccctggtt attgctgagc tctgtgctca gtgctgcggc
                                                                     1680
                                                                     1740
ctggccgtgg ctcgtctgtt cctttggggg gcccgggcgg gttgtgggaa tcagtcttca
                                                                     1800
cagacagacg tgagccaggc ggaggactcg ttccttgcag aggtcagtcc tcacctgcag
gtgtcggggt ggrgggggc aaggagggc aggcacacac catgtctgac ctgaacccga
                                                                     1860
ttctggggag catcttcccg ctccggcccc acgacctcca cagggttaca ttgtaatata
                                                                     1920
tatgccccag ctaacctgtc tgatggtggc atcttcctgc agacatttca aacatgtaac
                                                                     1980
                                                                     2040
2083
aaaaaaaaa aaaaaaaaa aaaaaaaaa agg
<210> 42
<211> 1016
<212> DNA
<213> Homo sapiens
<400> 42
taatteggca gagecageet gggtgeetgt atgegetega ggegggggeg egggttgegg
                                                                       60
acggaggcgc gggaggcggt tctgcgcggc gggggccgta cccgcggcgg agcgaggagg
                                                                      120
cgagaatgga tcaatggtgt cacggagcac atcgctgacg ctgattgtgt tccttttcca
                                                                      180
cagattgtct aaagccccag gaaaaatggt ggaaaattca ccgtcgccat tgccagaaag
                                                                      240
agcgatttat ggctttgttc ttttcttaag ctcccaattt ggcttcaaaa atctgaaggg
                                                                      300
atctcgtgtt tgctgagtgt tccgtgtgcc agcactagcc taggaggttt tagtctctac
                                                                      360
aaatatttat acagcaccag acgcgatggc aaagtggata aagcctggtc cctgccctta
                                                                      420
aggaggtcgt ggtcttgtgg aggagacaga tggtacttta cctcgtgtgg gcctttattc
                                                                      480
ctgaatcttg gctaaactct ttaggtttaa cctattggcc tcaaaaatat tgggcagttg
                                                                      540
```

```
cattacctgt ctacctcctt attgctatag taattggcta cgtgctcttg tttgggatta
                                                                      600
acatgatgag tacctctcca ctcgactcca tccatacaat cacagataac tatgcaaaaa
                                                                      660
atcaacagca gaagaaatac caagaggagg ccattccaqc cttaagagat atttctatta
                                                                      720
gtgaagtaaa ccaaatgttc tttcttgcag ccaaaqaact ttacaccaaa aactgaactg
                                                                      780
tqtgtaacca tagtaacacc aagcacgtat ttatttataa qtttttqcca ttataatttt
                                                                      840
qaccataaat taatttgacc atctctctta ttaataqaqa aqtaaaaaat qtaaqttgac
                                                                      900
cttctcttag attatqttca atgaatattq taaatqttca aqtattqtta atqaataqaa
                                                                      960
1016
<210> 43
<211> 2197
<212> DNA
<213> Homo sapiens
<400> 43
ggtttgagaa actgtagtac ctagctttct ccaaggctgt ttgatgctgg gatcctcttg
                                                                       60
tggggggcgt ctgtcaacgt caccatttgg gaagtgcgca ragctcarag cagcgcttcc
                                                                      120
atgetteett etgettgggg geceeteeag gtagettett tettettget atettttyet
                                                                      180
ttctgttttc tctcctcttc cccgcacctt gggaggcagg agacccactt kgtkgtgctk
                                                                      240
gargatgatg agggcgcccc gtgcccagca gaggatgagc tggccctgca ggacaacggg
                                                                      300
ttcctgagca agaatgaggt gctgcgcaca aggtgtctcg gctcacggag cggctccgca
                                                                      360
agogotacco caccaacaac ttogggaact goacgggotg ctoggocaco ttotcaqtgo
                                                                      420
tgaagaagag gcggagctgc agtaattgtg gaaacagctt ctgctctcga tgctgctcct
                                                                      480
tcaaggtgcc caagtcctcc atgggggcca cagccctgaa gcccagaggg agactgtgtt
                                                                      540
tgtgtgtgcc tcgtgtaacc agaccttgag caagtgagaa gagaggccag ggtccaacca
                                                                      600
ggcacccgtc cttggggcca gcagtagacc ccccactctc cccacccctg gcccactgtg
                                                                      660
gtgtgtgctg ggcaaatgtg gcctgaatgc taggtaggct tccccttcct tcctcactct
                                                                      720
ctccagctgg attctggagc tgttctccat ccatgagagt ggctggcaat ggctgctctc
                                                                      780
aatcccttga gggagaagag cccctggagg gcctggcatg tttgccctgc tctgcctggg
                                                                      840
actgagcgag tggacttagg gctgggcagg cagtagccac cagagggcag cagcgaacta
                                                                      900
ggccaggcct gactggggtc tgaagatcag ggtcagtgtg gctatgcctg ggaattccag
                                                                      960
acctgaggtt gggaaaagag gtttttctcc tgcagggtac tgggccaggc cctcagcctc
                                                                     1020
agagageetg cagaaggget tgggagtgee acaccccate tetgetgatt gaatgteeet
                                                                     1080
ccaggcacca ggatctcatc atttccccat cagagggtgt ggccaggcct aacaaqacca
                                                                     1140
tgggtgcttc tagaaacagg gttgaagttc ccagattccc tgaqaqqaqa atqtqtataq
                                                                     1200
gagggtttgg ctgagtcctt cagcgttaag tggaggaaag cttqqqqaaq ccccaatagc
                                                                     1260
tggacagacc tcagcctccc ctcgaagaca cctcaattca cagactctca qcccacacaa
                                                                     1320
tgccccagtg tccccagctc cgctqqaqca gctqcaqqqc acttqqatca caacttctqc
                                                                     1380
accetetgte cagagtetag ggcagteete caetggeeca geactecagt tteettteee
                                                                     1440
tgcctcttgt ccaatggagt gggaggccag gtgagtggag cagaggtcct gaagcccttg
                                                                     1500
acccctgggg gcctgggtag tgtaggatct cgctgggctg ggtcctggat tccagggcta
                                                                     1560
ttccctggag gacagtctca gttatgggat aaggccccct gggggtctcc atttctttcc
                                                                     1620
aacagtttca tgttcactac tggactctta cgggctcagt atctctccct tagccatgag
                                                                     1680
ctggctcagg catcccttcc cttccctgga gctgccctgc ctttctcaag tatttattta
                                                                     1740
tttattgcat ggttcctggg aacatgtggc acaagtaatg ggatgaggag gaattggggg
                                                                     1800
tgggggtctt ctacctagga ctcttccctg gagtcatggg ctgcctgqga cccaggaccc
                                                                     1860
atgagggggc tgagaggttt ctacactcga ggagcagggg tccagagagg caggctgggg
                                                                     1920
aggcaaggga cccatcctag gcccgctttc ttgccqaqcc aagcaqctta gctqqqqctq
                                                                     1980
tgcagccagg ggcttaccca ggccagtgga ggtgccacag ccctggggag ccagacaggc
                                                                     2040
tttggtatcg tatcqcctct qtqtcctttt aaqaqaqqaq aqttcaqtac cccqtqcttt
                                                                     2100
ctttacactg gagaggaact aaaaggatct ctgtgtctat ggagaattgt caataaaaag
                                                                     2160
gcctcaagct tmaaaaaaaa aaaaaaaaaa ctcgtag
                                                                     2197
<210> 44
```

<210> 44 <211> 1999 <212> DNA <213> Homo sapiens

```
<220>
<221> misc_feature
<222> (965)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (973)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (1110)
<223> n equals a,t,g, or c
<400> 44
ggcacgagcc caaccacaca cctggggaat tgctggcctg acttctgacc cctgactcct
                                                                         60
cataccette etceagagea tgacatttga ceaceaactg aaacetgace tetgaceeea
                                                                        120
gaccactggc ccttcccccg ccctgtggtg acttcataaa ggttactagc ttctcccctg
                                                                        180
gccttgagac ccacacgatg gccctgctgg ctctggccag tgccgtcccg tctgccctgc
                                                                        240
tggccctggc tgtcttcagg gtgcccgcct gggcctgtct cctctgcttc acaacctact
                                                                        300
ctgagcgcct ccgcatctgc cagatgtttg ttgggatgcg gagcccaagc ttgaagagtg
                                                                        360
tgaggaggcc ttcacggccg ccttccaggg cctctctgac accgaaatca gtgaggagac
                                                                        420
catccacact tcatcagtgt cctggggaag gtgcagaggg agggcaggag aggcccagag
                                                                        480
ggtcaggctg agggacagac agagagaaac agtcagagga gaaaggctca aagaccatga
                                                                        540
gaacaacaga gacttaggga cagagagaca cagacagggg asqacaqcag ggcaaaqact
                                                                        600
cagagagggg aggatggaga gtcagagagg ggaagatgga gactcagaga gggggaggat
                                                                        660
ggagactcag agagagaga agatggagac tcggaaagat ggagactcag gagtatggag
                                                                        720
agtcagagag gggaggatgg acactcggga ggatggagag tcaggaggat ggagactcat
                                                                        780
agaaagggga ggatggagag tcaggagagg ttggagactg gagagggaat agagacccag
                                                                        840
agaggggagg atggagactc agagggtgga agatggagac tcaaagagga tggaaaccca
                                                                        900
ggagagagga ggacagagat gaggcagaga ctaggggaag caggatagcg actggtcggg
                                                                        960
ggcanagact canggaggat agagacttgg gagggactca ggaagcatag cgactgtggg
                                                                       1020
gcaaagagtc agagagggga ggatacagac ttgggagggc agagactcag aaacagaatg
                                                                       1080
ttegcattag ggacatggtg ttgeggggan etgeeteece cageceetge teeeteecte
                                                                       1140
accgccagac tatgatgaga gaagccacct gcatgacacc ttcacccaga tgacccatgc
                                                                       1200
cctgcaggag ctggctgctg cccagggatc ctttgaggtt gccttccctg atgctgcgga
                                                                       1260
qaaaatqaaq aaqqtcttta cacaqcttaa aqaaqcccaq qcttqcatcc ctccctqcqa
                                                                       1320
aggtctccag gagttcgccc ggcgtttcct ctgcagcggg tgctactcta gggtctgcga
                                                                       1380
cctcccgctg gactgcccag ttcaggatgt gacagtgact cggggcgacc aggctatgtt
                                                                       1440
ttettgeate gtaaacttee agetgeeaaa ggaggagate acetatteet ggaagttege
                                                                       1500
aggaggaggt ctccggactc aggacttgtc ctatttccga gatatgccgc gggccgaagg
                                                                       1560
atacetggcg eggateegge eggeteaget caegeacege gggaegttet eetgegtgat
                                                                       1620
caagcaagac cagcgcccc tggcccggct ctacttcttt cttaacgtga cgggccqccc
                                                                       1680
ccgcgggcgg agacagagtt gcaggcctcg ttccgggaag tgctgcgctg ggcgccgcgg
                                                                       1740
gatgccgagc tgatcgagcc ctggaggccc agcctgggcq aqctqctqqc caqqcccqaq
                                                                       1800
getetgaege ceageaatet gtteetgett geagteeteg qqqcccteqe ateaqeqaqt
                                                                       1860
gcgacagtgt tggcqtggat qttctttcqa tggtactqca qtqqcaacta acaaaqqtat
                                                                       1920
ctttcctcct tccctatcct atttccatcc tgaaaataaa qaatatattt caactctaaa
                                                                       1980
aaaaaaaaa aaaaaaaaa
                                                                       1999
<210> 45
<211> 1519
<212> DNA
<213> Homo sapiens
<400> 45
cggcacgagg taaattctgc cttcacccag tatatctttc caatgtagga tgatttattt
                                                                         60
ttcattacat ttgttctaag attttgtagt gattactcta gtgtttgtca tgtaaatgtt
                                                                        120
```

```
agtttatcaa aatcaggctc agttctccag taatatgtgg ttaaatttca gtgatgtaca
                                                                        180
cacatatttg teetetataq etetattatg tttttgeett tetggggtae tttgttgeat
                                                                        240
atgtaacaac tcagtgttcc acattcaaca atatattctt ataattatta cttttccact
                                                                        300
ggtagtcatt tagttcagtt tttatggtgt tatttataaa tataatacat gtatgttaaa
                                                                        360
tttttctatg ttgtaggcct aacaatccat tactacttat tactttacac aattgacttg
                                                                        420
taaatccata acaaggagaa aggtgaagaa acacatattc agtttgtctt ttccacttat
                                                                        480
atagtettge atggtgetet etgettttte etgtggattt tgacagacte aataattttt
                                                                        540
tttttttttg agatggagte tteetetqtt gteecagget ggagtgeggt ggetetatet
                                                                        600
tggccactgc agcctccacc tgccgggttc aaatgattgt cctgcctcag ccccccaagt
                                                                        660
agctgggact acaggcgtgt gccaccacac ccggctaatt tttgtatttt tttttttt
                                                                        720
tgtagagaca gggttttgcc atgtttgcca gggtgctctc aaactcctga cctctagtga
                                                                        780
tecaceagee teggeeteee aaagtgetga gattacagae gegageeace geacetggea
                                                                        840
ctttggtctt gtagggctgg tgtgccagga aaaattctct caatgttcat atttttaagc
                                                                        900
ctaggaaaat atttgttttg tctttcattt tgaacatgaa cattgttgga ttctggttaa
                                                                        960
ggtgtgttttt ggagcagagc atgatgaggg actgggtgag gggcttccca gtgaaaggag
                                                                       1020
qaacaqaacc tagcaaaaqc aaatatqtct qtttcactcc aatcacttat tacaataacc
                                                                       1080
tctattactt aatatcaaaa aaaaagcaat gatcaatatg ttgaaaggga tggaagaagc
                                                                       1140
aagtatgatg tttgaccata atagcattca ttgcttggga aactaaagac aaaacaactg
                                                                       1200
                                                                       1260
qaaaactatt aacactgttg gccaggtgtg gtggctcatg cctgtcatcc cagcactttg
qqaqqctqqq qtqqatqqat cqcttqaqcc caqqaqttcq aqaccaqcct qqqcaacatq
                                                                       1320
gcgaaacctc atctctacaa aaaatacaaa aaattacccg ggtctggtgg tgtgttcctg
                                                                       1380
tggtcccagc tactcgggag gctgagatgg aaggattgct tgagcctggg aagtcgatgc
                                                                       1440
tgcagtgagc caggattgca ccactgcact ctagcctgag tgacagagtg agaccctgtc
                                                                       1500
taaaaaaaa aaaaaaaaa
                                                                       1519
<210> 46
<211> 1189
<212> DNA
<213> Homo sapiens
<400> 46
ggcacgagat ttaatacaaa gtttgctttg agacttttca gcatatgatc ttttttccat
                                                                         60
aaacttgtac agtgcaaaag acattttgaa taccatgatc gatgatgtcc catgcttcga
                                                                        120
ggaaaaccaa acactttccg cctctcttgc aaaatccatt cctcatgctg accctcctca
                                                                        180
cgatggctgt gtcagcccag cccttccct tctccaggcc cagataactc ttccacaaac
                                                                        240
aagatgagag ccactcggga aaagagccat agtcaactgg gagggcctac atctggatgg
                                                                        300
cggtggaaaa acttgagggt ttggggttca aagtcagccc atcccacctg gcaaaatcct
                                                                        360
cctggaagga ggaccttcaa gagcgcatca cctgaatgtc atgaagaagt atctctgaat
                                                                        420
gtatccagga gaggaactgc ataaccaaag gggtgaccag ccctcagatg tgcttattgg
                                                                        480
                                                                        540
attccagtac aaacgccacc aaagccagcc cactgctctc ctacaaggaa ggaaagatct
gcacgtgtaa aacatggggc agccttggaa catggtgttt tttggagttt cctttctcac
                                                                        600
agttttccat ctccccactt ctttgatcag tcatgtgtcc gtgacctcgt tccatgacat
                                                                        660
caggatagct gtgtttgcac accatgctgc atgttcattt ggagccagga ggggttctca
                                                                        720
gtggagcctg gcttagggaa cagggagcga tggaagaatg ccaacattag cgttggtctt
                                                                        780
ctcttgtcag gaatgaagga tgcttgcaca catgcacccc ctcactctca cacttgcaca
                                                                        840
catacacaca cacacacacg aaatggttgg tttgtcaaaa ctcactgtag tacataaagc
                                                                        900
ttgcactctg cgtcctatat ctagcagcat ggggtacgtt tggcagttca ctccattagg
                                                                        960
gggtaaataa tttatgacca ttcatctgtt tttatgaatt tttttatcta gacaataatt
                                                                       1020
gtaaataaag aactcaccat ctctgttcat ttaatactat gcaatggtta tgctttcaat
                                                                       1080
cgctggctct tctgactcgt gcagtgtggt tctgaaatgt ttgtggttta aaaaaaaaag
                                                                       1140
caaaaaacac tcaacagaac atagtaaata taaaaaaaaa aaaaaaaaa
                                                                       1189
<210> 47
```

<211> 2584

<212> DNA

<213> Homo sapiens

```
<221> misc_feature
<222> (1389)
<223> n equals a,t,g, or c
<400> 47
acceaegegt cegegggeac eggeegacat ggeggeageg gtggeggetg egetggegeg
                                                                       60
gcttttggcg gcctttctgc tcctcgcggc ccaggtggcc tgtgagtacg gcatggtgca
                                                                      120
cgtggtctcc caggccgggg gccccgaagg caaagactac tgcatcctct acaacccgca
                                                                      180
gtgggcccat cttccgcacg acctcagcaa ggcatctttc ctgcagctgc gcaactggac
                                                                      240
qqcctccctg ctctgctccg cagccgacct ccccgcccgt ggcttcagca accagatccc
                                                                      300
qctgqtggcg cgggggaact gcaccttcta tgagaaagtg aggctggccc agggcagcgg
                                                                      360
acacgcgggc tgctcatcgt cagcagggag argctggtcc ccccgggggg taataagacg
                                                                      420
catatgatga gattggcatt cccgtggccc tgctcagcta caaagacatg ctggacatct
                                                                      480
tcacgcgttt cggccgcacg gtgagggcgg cgctgtatgc gcctaaggag ccggtgctgg
                                                                      540
actacaacat ggtcatcatc ttcatcatgg ctgtgggsac cgtcgccatc ggcggctact
                                                                      600
gggccgggak tcgggacgtg aagaaaaggt acatgaagca caagcgcgac gatgggcccg
                                                                      660
agaagcagga ggacgaggcg gtggacgtga cgccggtgat gacctgcgtg tttgtggtga
                                                                      720
tgtgctgctc catgctggtg ctgctctact ayttctacqa cctcctcqtg trcqtqqtca
                                                                      780
 tegggatett etgeetggee teegeeaceg geetetacag etgeetggeg eeetgtgtge
                                                                      840
qqcqqctqcc cttcggcaag tgcaggatcc ccaacaacag cctgccctac ttccacaagc
                                                                      900
gcccgcaggc ccgtatgctg ctcctggcgc tcttctgcqt qqscgtcaqc gtqqtqtqqq
                                                                      960
gegtetteeg caacgargae cagtgggeet gggteeteea ggatgeeetg ggeategeet
                                                                     1020
 totgoctota catgotgaag accatoogto tgoccacott caaqgootgo acqotgotgo
                                                                     1080
 tgctggtgct gttcctctac gacatcttct tcgtgttcat cacgcccttc ctgaccaaga
                                                                     1140
 gtgggagcag catcatggtg gaggtggcca ctgggccctc ggactcagcc acccgtgaga
                                                                     1200
 agetgeecat ggteetgaag gtgeecagge tgaacteete acetetggee etgtgtgaee
                                                                     1260
ggcccttctc cctcctgggt ttcggagaca ttttggtgcc agggctgctg gtggcctact
                                                                     1320
 gccacaggtt tgacatccag gtacagtcct ccagggtata cttcgtggcc tgcaccatcq
                                                                     1380
 cctatggynt tggcctcctt gtgacattcg tggcactggc cctgatgcag cgtggccagc
                                                                     1440
cogeteteet etacetggtg coetgeacge tggtgacgag etgegetgtg gegetetgge
                                                                     1500
 gcygkgaget gggegtgtte tggaegggea geggetttge gaaagteeta eetecatete
                                                                     1560
 cgtgggcccc agcaccagcc gacggcccgc agcctcccaa agactctgcc acgccactct
                                                                     1620
 ccccgcagcc gcccagcgaa gaaccagcca catccccctg gcctgctgag cagtccccaa
                                                                     1680
 aatcacgcac gtccgaggag atgggggctg gagccatgct gggascctgg gagcccagct
                                                                     1740
 gaatccgagg gccgggacca ggccagccgt ccccggtaac ccagcctggc gcctcggcct
                                                                     1800
 aggggagggg tgagacgctc gctgccgtgc ccgccacacc aagatgttgg ggctgcctgg
                                                                     1860
 cgcccactgg agacagacag acagacgcyt gtcccccggg accgaggcct gtgccgtccc
                                                                     1920
 caccegeece aacatggtge ttateettge egagaceect geagteegtg eeegegeeca
                                                                     1980
 gcccagctgc cccggctgca cgcctgctgc tcccagctcg cccggctgcc acaagctctc
                                                                     2040
 tgcgggtcca tcctcccgc aggaggaggg gtccgtcctc gcaggccytg cccggcctct
                                                                     2100
 etgeagacce teaagegteg tetgeatgag tgageaggeg tgggtggaet etggeegegg
                                                                     2160
 ccacacttgg tgctcaccag ctgcttcggc cttcaggtga cctccctccc cacggcatcc
                                                                     2220
 tgctctccgg gtggaagagc agctttctgt ctcccagaag gcatcgcttt tccctcttga
                                                                     2280
 gcagatcgga gcccctggga ggtttggaag ctgcctccaa gcctaggaca cggaccggtg
                                                                     2340
 gccggggcgg cctctggccc ctgacgctgg ctgagacagg cccgtggggc ggggttttgg
                                                                     2400
 2460
 ecctcageca gaggtgeetg gecatgeetg cacacteete eccattttaa taaatggteg
                                                                     2520
 2580
 ccqc
                                                                     2584
<210> 48
<211> 55
<212> PRT
<213> Homo sapiens
<400> 48
Met Ile Lys His Ala Leu Ile Arg Pro Phe Ile Val Phe Ser Leu Leu
                                    10
```

Leu Arg Leu Cys Ser Glu Asn Leu Phe Cys Pro Asn Thr Gln Phe Ile 20 25 30

Val Leu Ser Cys Phe Gln Ser Val Val Lys Ser Leu Leu Ser Ile Leu 35 40 45

Asn Leu Ser Tyr Cys Ile Phe 50 55

<210> 49

<211> 40

<212> PRT

<213> Homo sapiens

<400> 49

Met Asn Ser Cys Leu Phe Leu Cys Ile Leu Ile Leu Glu Ser Ala Met

1 5 10 15

Val Val Leu Met Lys Val His Phe Ile Val Ala Phe Glu Leu Thr Ala 20 25 30

Lys Ala Ile Asn Gln Lys Gln Lys 35 40

<210> 50

<211> 93

<212> PRT

<213> Homo sapiens

<400> 50

Met Ala Arg Lys Ser Phe Ala Leu Leu Met Phe Val Trp Gln Met Ser 1 5 10 15

Leu Ser Leu Pro Ile Lys Gly Phe Ile Leu Arg Val Ala Asn Trp Leu 20 25 30

Phe Lys Pro His Leu Asn Ser Val Cys Leu Gly Trp Gln Asn His Thr 35 40 45

Arg Phe Cys Trp Ala Asn Leu Pro Gly Gly Val Leu Leu Glu Glu Ser 50 55 60

Ala Thr Ala Glu Asp Thr Leu Ser Trp Pro Leu Ala Leu Gln Thr Ile 65 70 75 80

Val Glu Glu Gly Val Trp Gly His Gln Pro Leu Pro Gly
85 90

<210> 51

<211> 83

<212> PRT

<213> Homo sapiens

<400> 51

Met Leu Ser Leu Phe Phe Cys Phe Trp Lys Pro Ser Phe Leu Val Ser 1 5 10 15

Arg Leu Val Ile Trp Leu Gly Leu Val Cys Gly Gly Arg Ser Leu Ser 20 25 30

Trp Val Ala Leu Gly Glu Asp Tyr Leu Gly Thr Pro Ile Leu Ile Pro 35 40 45

Asn Ile His Gln Thr Cys Pro His Pro Pro Leu Trp Glu Leu Val Pro 50 55 60

Glu His Pro Cys Arg Leu Val Leu Ile Phe Ser Leu Cys Glu His Thr 65 70 75 80

His Ile Arg

<210> 52

<211> 65

<212> PRT

<213> Homo sapiens

<400> 52

Met Leu Ser Pro Lys Ser Pro Arg Met Leu Leu Pro Cys Leu Leu Gln
1 5 10 15

Pro Leu Val Val Ala Asn Ile Pro Arg Val Pro Trp Leu Ala Asp Glu 20 25 30

Ser Leu Asn Pro Thr Pro Ile Ile Thr Trp Gln Ser Pro Cys Val Ala 35 40 45

Gln Leu Cys Pro Asn Phe Pro Phe Pro Thr Arg Thr Leu Val Thr Gly
50 55 60

Leu

65

<210> 53

<211> 52

<212> PRT

<213> Homo sapiens

<400> 53

Met His Cys His Ser Ala Leu Gly Pro Met Ser Thr Pro Val Leu Pro 1 5 10 15

Phe Ser Gly Ile Gly Leu Ala Phe Leu Cys Leu Cys Leu Ala Ala Ser 20 25 30

Met Val Asp Leu Lys Cys Leu Gly Met Asn Ser Thr Leu Leu Gln Pro 35 40 45

Ser Ile Lys Glu 50

<210> 54

<211> 540

<212> PRT

- <213> Homo sapiens
- <220>
- <221> MISC_FEATURE
- <222> (10)
- <223> Xaa equals any of the naturally occurring L-amino acids
- <220>
- <221> MISC FEATURE
- <222> (469)
- <223> Xaa equals any of the naturally occurring L-amino acids
- <400> 54
- Met Ala Thr Ser Gly Ala Ala Ser Ala Xaa Leu Val Ile Gly Trp Cys

 1 10 15
- Ile Phe Gly Leu Leu Leu Leu Ala Ile Leu Ala Phe Cys Trp Ile Tyr 20 25 30
- Val Arg Lys Tyr Gln Ser Arg Arg Glu Ser Glu Val Val Ser Thr Ile 35 40 45
- Thr Ala Ile Phe Ser Leu Ala Ile Ala Leu Ile Thr Ser Ala Leu Leu 50 55 60
- Pro Val Asp Ile Phe Leu Val Ser Tyr Met Lys Asn Gln Asn Gly Thr 65 70 75 80
- Phe Lys Asp Trp Ala Asn Ala Asn Val Ser Arg Gln Ile Glu Asp Thr
 85 90 95
- Val Leu Tyr Gly Tyr Tyr Thr Leu Tyr Ser Val Ile Leu Phe Cys Val
 100 105 110
- Phe Phe Trp Ile Pro Phe Val Tyr Phe Tyr Tyr Glu Glu Lys Asp Asp 115 120 125
- Asp Asp Thr Ser Lys Cys Thr Gln Ile Lys Thr Ala Leu Lys Tyr Thr 130 135 140
- Val Pro Leu Asn Val Pro Asn Asn Lys Asn Ser Thr Glu Trp Glu Lys 165 170 175
- Val Lys Ser Leu Phe Glu Glu Leu Gly Ser Ser His Gly Leu Ala Ala 180 185 190
- Leu Ser Phe Ser Ile Ser Ser Leu Thr Leu Ile Gly Met Leu Ala Ala 195 200 205
- Ile Thr Tyr Thr Ala Tyr Gly Met Ser Ala Leu Pro Leu Asn Leu Ile 210 215 220
- Lys Gly Thr Arg Ser Ala Ala Tyr Glu Arg Leu Glu Asn Thr Glu Asp 225 230 235 240
- Ile Glu Glu Val Glu Gln His Ile Gln Thr Ile Lys Ser Lys 245 250 255

Asp Gly Arg Pro Leu Pro Ala Arg Asp Lys Arg Ala Leu Lys Gln-Phe
260 265 270

Glu Glu Arg Leu Arg Thr Leu Lys Lys Arg Glu Arg His Leu Glu Phe 275 280 285

Ile Glu Asn Ser Trp Trp Thr Lys Phe Cys Gly Ala Leu Arg Pro Leu 290 295 300

Lys Ile Val Trp Gly Ile Phe Phe Ile Leu Val Ala Leu Leu Phe Val 305 310 315 320

Ile Ser Leu Phe Leu Ser Asn Leu Asp Lys Ala Leu His Ser Ala Gly 325 330 335

Ile Asp Ser Gly Phe Ile Ile Phe Gly Ala Asn Leu Ser Asn Pro Leu 340 345 350

Asn Met Leu Leu Pro Leu Leu Gln Thr Val Phe Pro Leu Asp Tyr Ile 355 360 365

Leu Ile Thr Ile Ile Ile Met Tyr Phe Ile Phe Thr Ser Met Ala Gly 370 375 380

Ile Arg Asn Ile Gly Ile Trp Phe Phe Trp Ile Arg Leu Tyr Lys Ile 385 390 395 400

Arg Arg Gly Arg Thr Arg Pro Gln Ala Leu Leu Phe Leu Cys Met Ile 405 410 415

Leu Leu Ile Val Leu His Thr Ser Tyr Met Ile Tyr Ser Leu Ala
420 425 430

Pro Gln Tyr Val Met Tyr Gly Ser Gln Asn Tyr Leu Ile Glu Thr Asn 435 440 445

Ile Thr Ser Asp Asn His Lys Gly Asn Ser Thr Leu Ser Val Pro Lys 450 455 460

Arg Cys Asp Ala Xaa Ala Pro Glu Asp Gln Cys Thr Val Thr Arg Thr 465 470 475 480

Tyr Leu Phe Leu His Lys Phe Trp Phe Phe Ser Ala Ala Tyr Tyr Phe
485 490 495

Gly Asn Trp Ala Phe Leu Gly Val Phe Leu Ile Gly Leu Ile Val Ser 500 505 510

Cys Cys Lys Gly Lys Lys Ser Val Ile Glu Gly Val Asp Glu Asp Ser 515 520 525

Asp Ile Ser Asp Asp Glu Pro Ser Val Tyr Ser Ala 530 535 540

<210> 55

<211> 177

<212> PRT

<213> Homo sapiens

```
<220>
```

<221> MISC FEATURE

<222> (67)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 55

Met Phe Gln Val Arg Pro Gly Trp Gln Leu Leu Val Met Phe Ser
1 10 15

Ser Cys Ala Val Ser Asn Gln Leu Leu Val Trp Tyr Pro Ala Thr Ala 20 25 30

Leu Ala Asp Asn Lys Pro Val Ala Pro Asp Arg Ile Ser Gly His
35 40 45

Val Gly Ile Ile Phe Ser Met Ser Tyr Leu Glu Ser Lys Gly Leu Leu 50 55 60

Ala Thr Xaa Ser Glu Asp Arg Ser Val Arg Ile Trp Lys Val Gly Asp 65 70 75 80

Leu Arg Val Pro Gly Gly Arg Val Gln Asn Ile Gly His Cys Phe Gly 85 90 95

His Ser Ala Arg Val Trp Gln Val Lys Leu Leu Glu Asn Tyr Leu Ile 100 105 110

Ser Ala Gly Glu Asp Cys Val Cys Leu Val Trp Ser His Glu Gly Glu
115 120 125

Ile Leu Gln Ala Phe Arg Gly His Gln Asp Val Tyr Pro Val Val Val 130 135 140

Gly Ala Glu Ile His Ala Glu Leu Tyr Gln Glu Leu Ala Tyr Leu Glu 145 150 155 160

Thr Glu Thr Glu Ser Leu Ala His Leu Phe Ala Leu Val Pro Arg Pro 165 170 175

Glu

<210> 56

<211> 83

<212> PRT

<213> Homo sapiens

<220>

<221> MISC FEATURE

<222> (36)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 56

Met Ser Leu Ile Trp Glu Gln Gly Leu Gln Leu Cys Gly Phe Cys Leu 1 5 10 15

Phe Tyr Leu Val Phe Cys Phe Cys Ile Ser Ser Leu Arg Val Met Ala

20 25 30

Phe Ser Cys Xaa His Val Ala Cys Cys Lys Gly Tyr Asp Phe Val Leu 35 40 45

Phe Tyr Gly Cys Val Val Phe His Gly Val Tyr Gly Pro His Phe Leu 50 60

Tyr Pro Ile His His Ile Trp Ala Pro Arg Leu Ile Pro Cys Leu Cys
65 70 75 80

Tyr Cys Glu

<210> 57

<211> 131

<212> PRT

<213> Homo sapiens

<400> 57

Met Leu Trp Thr Leu Thr Phe Phe Leu Leu Gln Arg Ser Leu Thr Ser 1 5 10 15

Pro Trp Leu Phe Gly Leu Leu Phe Leu Gly Ser Ser Asn Thr Ala Val 20 25 30

Cys Cys Phe Leu Gly Gln Leu Ile Met Gly Pro Lys Gly Glu Arg Gly 35 40 45

Phe Pro Gly Pro Pro Gly Arg Cys Leu Cys Gly Pro Thr Met Asn Val 50 55 60

Asn Asn Pro Ser Tyr Gly Glu Ser Val Tyr Gly Pro Ser Ser Pro Arg 65 70 75 80

Val Pro Val Val Arg Leu Ser Gly Arg Ser Leu Gly Trp Leu Ser Val 85 90 95

Arg Thr Ser His Leu Ile Leu Met Gly Leu Cys Lys Ile Leu Ser Val 100 105 110

Lys Leu Thr Phe Phe His Asp Ser Glu Tyr Thr Leu Ile Ile Gly Asn 115 120 125

Trp Lys Ile 130

<210> 58

<211> 187

<212> PRT

<213> Homo sapiens

<220>

<221> MISC_FEATURE

<222> (167)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 58

Met Gly Phe Phe Leu Val Leu Val Met Glu Gln Ile Thr Leu Ala Tyr
1 5 10 15

Lys Glu Gln Ser Gly Pro Ser Pro Leu Glu Glu Thr Arg Ala Leu Leu 20 25 30

Gly Thr Val Asn Gly Gly Pro Gln His Trp His Asp Gly Pro Gly Val
35 40 45

Pro Gln Ala Ser Gly Ala Pro Ala Thr Pro Ser Ala Leu Arg Ala Cys
50 55 60

Val Leu Val Phe Ser Leu Ala Leu His Ser Val Phe Glu Gly Leu Ala 65 70 75 80

Val Gly Leu Gln Arg Asp Arg Ala Arg Ala Met Glu Leu Cys Leu Ala 85 90 95

Leu Leu Leu His Lys Gly Ile Leu Ala Val Ser Leu Ser Leu Arg Leu 100 105 110

Leu Gln Ser His Leu Arg Ala Gln Val Val Ala Gly Cys Gly Ile Leu 115 120 125

Phe Ser Cys Met Thr Pro Leu Gly Ile Gly Leu Gly Ala Ala Leu Ala 130 135 140

Glu Ser Ala Gly Pro Leu His Gln Leu Ala Gln Ser Val Leu Glu Gly 145 150 155 160

Met Ala Ala Gly Thr Phe Xaa Tyr Ile Thr Phe Leu Glu Ile Leu Leu 165 170 175

Phe His Pro Lys Phe Lys Gly Val Ser Arg Arg 180 185

<210> 59

<211> 40

<212> PRT

<213> Homo sapiens

<400> 59

Met Thr Phe Ser Pro Leu Ser Ser Thr Phe Trp Trp Ser Ser Arg Phe 1 5 10 15

His Cys Glu Met Leu Trp Phe Val Ser Leu Leu Val Thr Phe Thr Ala 20 25 30

His Ser Val Glu Tyr Ser Gln Tyr 35 40

<210> 60

<211> 338

<212> PRT

<213> Homo sapiens

<400> 60

Met Tyr Gly Tyr Val Asp Thr Leu Leu Thr Met Leu Ala Met Leu Leu

- Lys Val Ala Met Asn Arg Ala Gln Val Cys Leu Ile Ser Ser Lys 20 25 30
- Ser Gly Glu Arg His Leu Tyr Leu Ile Lys Val Ser Arg Asp Lys Ile 35 40 45
- Ser Asp Ser Asn Asp Gln Glu Ser Ala Asn Cys Asp Ala Lys Ala Ile 50 55 60
- Phe Ala Val Leu Thr Ser Val Leu Thr Lys Asp Asp Trp Trp Asn Leu 65 70 75 80
- Leu Leu Lys Ala Ile Tyr Ser Leu Cys Asp Leu Ser Arg Phe Gln Glu 85 90 95
- Ala Glu Leu Val Asp Ser Ser Leu Glu Tyr Tyr Ser Phe Tyr Asp 100 105 110
- Asp Arg Gln Lys Arg Lys Glu Leu Glu Tyr Phe Gly Leu Ser Ala Ala 115 120 125
- Ile Leu Asp Lys Asn Phe Arg Lys Ala Tyr Asn Tyr Ile Arg Ile Met 130 135 140
- Val Met Glu Asn Val Asn Lys Pro Gln Leu Trp Asn Ile Phe Asn Gln 145 150 155 160
- Val Thr Met His Ser Gln Asp Val Arg His His Arg Phe Cys Leu Arg 165 170 175
- Leu Met Leu Lys Asn Pro Glu Asn His Ala Leu Cys Val Leu Asn Gly
 180 185 190
- His Asn Ala Phe Val Ser Gly Ser Phe Lys His Ala Leu Gly Gln Tyr 195 200 205
- Val Gln Ala Phe Arg Thr His Pro Asp Glu Pro Leu Tyr Ser Phe Cys 210 215 220
- Ile Gly Leu Thr Phe Ile His Met Ala Ser Gln Lys Tyr Val Leu Arg 225 230 235 240
- Arg His Ala Leu Ile Val Gln Gly Phe Ser Phe Leu Asn Arg Tyr Leu 245 250 255
- Ser Leu Arg Gly Pro Cys Gln Glu Ser Phe Tyr Asn Leu Gly Arg Gly 260 265 270
- Leu His Gln Leu Gly Leu Ile His Leu Ala Ile His Tyr Tyr Gln Lys 275 280 285
- Ala Leu Glu Leu Pro Pro Leu Val Val Glu Gly Ile Glu Leu Asp Gln 290 295 300
- Leu Asp Leu Arg Arg Asp Ile Ala Tyr Asn Leu Ser Leu Ile Tyr Gln 305 310 315 320
- Ser Ser Gly Asn Thr Gly Met Ala Gln Thr Leu Leu Tyr Thr Tyr Cys

325 330 335

Ser Ile

<210> 61

<211> 47

<212> PRT

<213> Homo sapiens

<400> 61

Met Leu Thr Val Lys Ile Leu Lys Cys Phe Leu Gly Trp Ala Val Val 1 5 10 15

Ala Gly Gly Leu Gly Arg Ser Gln Ala Arg Pro Ser Leu Leu Phe Asn 20 25 30

Arg Leu Ser Pro Ser Val Pro Gln Met Arg Ile Gln Gln Pro Trp
35 40 45

<210> 62

<211> 336

<212> PRT

<213> Homo sapiens

<400> 62

Met Ala Ala Val Ala Ala Ala Leu Ala Arg Leu Leu Ala Ala Phe 1 5 10 15

Leu Leu Ala Ala Gln Val Ala Cys Glu Tyr Gly Met Val His Val
20 25 30

Val Ser Gln Ala Gly Gly Pro Glu Gly Lys Asp Tyr Cys Ile Leu Tyr 35 40 45

Asn Pro Gln Trp Ala His Leu Pro His Asp Leu Ser Lys Ala Ser Phe 50 60

Leu Gln Leu Arg Asn Trp Thr Ala Ser Leu Leu Cys Ser Ala Ala Asp
65 70 75 80

Leu Pro Ala Arg Gly Phe Ser Asn Gln Ile Pro Leu Val Ala Arg Gly 85 90 95

Asn Cys Thr Phe Tyr Glu Lys Val Arg Leu Ala Gln Gly Ser Gly Ala 100 105 110

Arg Gly Leu Leu Ile Val Ser Arg Glu Arg Leu Val Pro Pro Gly Gly
115 120 125

Asn Lys Thr Gln Tyr Asp Glu Ile Gly Ile Pro Val Ala Leu Leu Ser 130 135 140

Tyr Lys Asp Met Leu Asp Ile Phe Thr Arg Phe Gly Arg Thr Val Arg 145 150 155 160

Ala Ala Leu Tyr Ala Pro Lys Glu Pro Val Leu Asp Tyr Asn Met Val 165 Ile Ile Phe Ile Met Ala Val Gly Thr Val Ala Ile Gly Gly Tyr Trp 185 Ala Gly Ser Arg Asp Val Lys Lys Arg Tyr Met Lys His Lys Arg Asp 195 200 Asp Gly Pro Glu Lys Gln Glu Asp Glu Ala Val Asp Val Thr Pro Val Met Thr Cys Val Phe Val Val Met Cys Cys Ser Met Leu Val Leu Leu 225 230 235 Tyr Tyr Phe Tyr Asp Leu Leu Val Cys Val Val Ile Gly Ile Phe Cys Leu Ala Ser Ala Thr Gly Leu Tyr Ser Cys Leu Ala Pro Cys Val Arg 260 265 270 Arg Leu Pro Phe Gly Lys Cys Arg Ile Pro Asn Asn Ser Leu Pro Tyr 280 Phe His Lys Arg Pro Gln Ala Arg Met Leu Leu Leu Ala Leu Phe Cys 295 Val Ala Val Ser Val Val Trp Gly Val Phe Arg Asn Glu Asp Ser Gly 310 Pro Gly Ser Ser Arg Met Pro Trp Ala Ser Pro Ser Ala Ser Thr Cys

<210> 63

<211> 84

<212> PRT

<213> Homo sapiens

<400> 63

Met Lys Gly Trp Gly Trp Leu Ala Leu Leu Gly Ala Leu Leu Gly 1 5 10 15

Thr Ala Trp Ala Arg Arg Ser Gln Asp Leu His Cys Gly Ala Cys Arg
20 25 30

Ala Leu Val Asp Glu Leu Glu Trp Glu Ile Ala Gln Val Asp Pro Lys 35 40 45

Lys Thr Ile Gln Met Gly Ser Phe Arg Ile Asn Pro Asp Gly Ser Gln 50 60

Ser Val Val Glu Val Thr Val Thr Val Pro Pro Asn Lys Val Ala His 65 70 75 80

Ser Gly Phe Gly

84

```
<210> 64
```

<211> 62

<212> PRT

<213> Homo sapiens

<400> 64

Met Val Ala Val Thr Gly Gly Val Gly Val Ala Ala Ala Leu Cys Leu

1 10 15

Cys Ser Leu Leu Trp Pro Thr Arg Leu Arg Arg Ser Arg Gly Gly
25 30

Glu His Arg Thr Pro Ser Glu Gly Glu Gly Ile Ser Thr Ala Pro Pro 35 40 45

Pro Cys Trp Asn Glu Thr Gln Pro Gln Gly Gly Ala Lys Leu
50 55 60

<210> 65

<211> 49

<212> PRT

<213> Homo sapiens

<400> 65

Met Arg Leu Cys Ser Phe Thr Lys Val Pro Met Asn Leu Phe Leu Asn 1 5 10 15

Val Ile Leu Leu Lys Phe Tyr Asn Phe Leu Phe Ser Leu Ile Leu Gly
20 25 30

Lys Ser Cys Leu Ala Ser Leu Gly Leu Cys Lys Asn Asn Lys Cys Leu 35 40 45

Ser

49

<210> 66

<211> 401

<212> PRT

<213> Homo sapiens

<400> 66

Met Val Ala Leu Arg Gly Ala Ser Ala Leu Leu Val Leu Phe Leu Ala 1 5 10 15

Ala Phe Leu Pro Pro Pro Gln Cys Thr Gln Asp Pro Ala Met Val His 20 25 30

Tyr Ile Tyr Gln Arg Phe Arg Val Leu Glu Gln Gly Leu Glu Lys Cys 35 40 45

Thr Gln Ala Thr Arg Ala Tyr Ile Gln Glu Phe Gln Glu Phe Ser Lys
50 60

Asn Ile Ser Val Met Leu Gly Arg Cys Gln Thr Tyr Thr Ser Glu Tyr 65 70 75 80

Lys Ser Ala Val Gly Asn Leu Ala Leu Arg Val Glu Arg Ala Gln Arg Glu Ile Asp Tyr Ile Gln Tyr Leu Arg Glu Ala Asp Glu Cys Ile Glu 100 105 Ser Glu Asp Lys Thr Leu Ala Glu Met Leu Leu Gln Glu Ala Glu Glu 120 Glu Lys Lys Ile Arg Thr Leu Leu Asn Ala Ser Cys Asp Asn Met Leu 130 135 Met Gly Ile Lys Ser Leu Lys Ile Val Lys Lys Met Met Asp Thr His 150 Gly Ser Trp Met Lys Asp Ala Val Tyr Asn Ser Pro Lys Val Tyr Leu 165 170 Leu Ile Gly Ser Arg Asn Asn Thr Val Trp Glu Phe Ala Asn Ile Arg 185 Ala Phe Met Glu Asp Asn Thr Lys Pro Ala Pro Arg Lys Gln Ile Leu 195 Thr Leu Ser Trp Gln Gly Thr Gly Gln Val Ile Tyr Lys Gly Phe Leu Phe Phe His Asn Gln Ala Thr Ser Asn Glu Ile Ile Lys Tyr Asn Leu Gln Lys Arg Thr Val Glu Asp Arg Met Leu Leu Pro Gly Gly Val Gly Arg Ala Leu Val Tyr Gln His Ser Pro Ser Thr Tyr Ile Asp Leu Ala Val Asp Glu His Gly Leu Trp Ala Ile His Ser Gly Pro Gly Thr His 280 Ser His Leu Val Leu Thr Lys Ile Glu Pro Gly Thr Leu Gly Val Glu 295 His Ser Trp Asp Thr Pro Cys Arg Ser Gln Asp Ala Glu Ala Ser Phe 310 315 Leu Leu Cys Gly Val Leu Tyr Val Val Tyr Ser Thr Gly Gly Gln Gly 325 Pro His Arg Ile Thr Cys Ile Tyr Asp Pro Leu Gly Thr Ile Ser Glu 345 Glu Asp Leu Pro Asn Leu Phe Phe Pro Lys Arg Pro Arg Ser His Ser 355 Met Ile His Tyr Asn Pro Arg Asp Lys Gln Leu Tyr Ala Trp Asn Glu 375 Gly Asn Gln Ile Ile Tyr Lys Leu Gln Thr Lys Arg Lys Leu Thr Leu

395

390

```
<210> 67
<211> 57
<212> PRT
<213> Homo sapiens
<400> 67
Met Val Ser Leu Leu Ser Ser Tyr Leu Leu Leu Glu Leu Leu Ser
                                     10
Lys Arg Ser Leu Phe Leu Gln Trp Tyr Leu Phe Phe Gly Leu Gln Cys
             20
                                 25
Cys Ser Ser Phe Leu Cys Arg Lys Asn Glu Ser Gln Cys Phe Thr Arg
Leu Lys Glu Arg Ser Ala Gly Ser Val
     50
                         55
<210> 68
<211> 72
<212> PRT
<213> Homo sapiens
<400> 68
Met Leu Arg Pro Ala Leu Pro Trp Leu Tyr Leu Gly Leu Cys Ser Leu
Leu Val Gly Glu Ala Glu Ala Pro Ser Pro Val Asp Pro Leu Glu Arg
Ser Arg Pro Tyr Ala Val Leu Arg Gly Gln Asn Leu Val Leu Met Gly
Thr Ile Phe Ser Ile Leu Leu Val Thr Val Ile Leu Met Ala Phe Cys
Val Tyr Lys Pro Ile Arg Arg Arg
<210> 69
```

<211> 50

<212> PRT

<213> Homo sapiens

<400> 69

Met Leu Thr Tyr Leu Pro Arg Trp Cys Phe Leu Ser Leu Pro Pro Pro 1 5 10 15

Cys Cys Gly Ala Ala Ser Cys Thr Met Met His Ile Gln Ile Ile Leu 20 25 30

Asn Thr His Ile Leu Ile Glu Arg Phe Leu Gly Phe Leu Leu Asn Gln 35 40 45

```
Val Tyr
50
```

<210> 70

<211> 181

<212> PRT

<213> Homo sapiens

<400> 70

Met Thr Ser Arg Arg Ser Ser Thr Leu Ser Met Thr Ser Ser Leu Leu 1 5 10 15

Ser Leu Gly Cys Ala Leu Thr Ser Ala Phe Pro Ala Ser Thr Met Ser 20 25 30

Trp Val Pro Leu Gln Met Leu Asp Gln Ser Pro Arg Arg Val Met 35 40 45

Arg Lys Ser Val Ser Gln Leu Cys Pro Leu Leu Arg Pro His Pro Pro 50 55 60

Leu Ser Ser Lys His Pro Leu Val Leu Pro Leu Gln Leu Pro Pro Thr 65 70 75 80

Phe Leu His Leu Leu Pro Gly Pro Gly Cys Pro Gly Gln Thr Val Ala 85 90 95

Tyr Trp Leu Leu Glu Phe Leu Ser Arg Ala Thr Leu Lys Leu Tyr Pro 100 105 110

Gly Asp Arg Pro Leu Trp Leu Gln Pro Thr Arg Leu Asn Phe Lys Asp 115 120 125

His Trp Thr Ile Phe Ser Val Ala Ser Ala Ala Leu Phe Cys Val His 130 135 140

Arg Met Ala Thr Asp Arg His Ala Ser Phe Pro Thr His Trp Lys Ala 145 150 155 160

His Arg Gln Gly Glu Arg Gly His Arg Arg Cys Gln His Cys Arg Tyr 165 170 175

Ser Lys Asp Leu Lys 180

<210> 71

<211> 48

<212> PRT

<213> Homo sapiens

<400> 71

Met His Met Gly Leu Thr Thr Cys Lys Cys His Trp Lys Met Ala Tyr 1 5 10 15

Leu Arg Phe Leu Ile Leu Trp Ser Phe Pro Leu Ser Ser Ala Val Ser 20 25 30

Gly Ala Lys Arg Val Thr Asp Leu Leu Asn Gly Lys His Trp Lys Pro 35 40 45

<210> 72

<211> 53

<212> PRT

<213> Homo sapiens

<400> 72

Met Val Gln Phe Glu Val Ile Phe Leu Leu Phe Gly Leu Cys Phe Ser 1 5 10 15

Ser Ser Ser Ser Arg Leu Val Gly Ser Gln Val Glu Asn Phe Ser Pro $20 \hspace{1cm} 25 \hspace{1cm} 30 \hspace{1cm}$

Thr Pro Cys Ile Phe Gln Ala Phe Arg Cys Ser Ser Leu Ala Ile Ile 35 40

Ser Met Ser Leu Ser 50

<210> 73

<211> 74

<212> PRT

<213> Homo sapiens

<400> 73

Met Ser Val Val Pro Val Met Ile Pro Phe Leu Leu Leu Leu Phe Phe 1 5 10 15

Phe Ser Leu Ser Ser Thr His His Pro His Leu Leu Tyr Phe Ser Ile 20 25 30

Phe Ile Phe Ser Gly Ser Leu Leu Val Arg Ile Leu Ser Cys Arg Lys 35 40 45

Glu Ser Ser His Gln Val Leu Leu Ser Arg Lys Cys Phe Ile Lys Gly 50 55 60

His Arg Gln His Arg Gln Leu Thr Lys Val 65 70 74

<210> 74

<211> 64

<212> PRT

<213> Homo sapiens

<400> 74

Met Pro Leu Phe Leu Phe Val Ala His Leu Ile Ser Leu Leu Leu Ala 1 5 10 15

Phe Arg Arg Pro Pro Ala Ser Gln Ile Thr Pro Arg Ala Trp Thr Thr 20 25 30

Glu Ile Ala Ser Cys Glu Ser Val Glu Met Val Lys Ala Leu Ser Ser

5 40 45

Leu Arg Ser Arg Ala Gln Val Asn Ala Asp Phe Pro Gly His Leu Cys
50 55 60

<210> 75

<211> 43

<212> PRT

<213> Homo sapiens

<400> 75

Met Ser Ser Val Lys Cys Pro Tyr Met Trp Cys Phe Trp Ala Phe Pro 1 5 10 15

Leu Phe Gln Leu Ser Val Phe Ile Pro Val Ser Lys Ser His Ser Ile 20 25 30

Asn Tyr Tyr Asn Phe Ile Val Ser Leu Asn Ile 35 40

<210> 76

<211> 52

<212> PRT

<213> Homo sapiens

<400> 76

Met Ile Leu Phe Met Cys Phe Leu Val Tyr Cys Leu Ser Ser Val Glu

1 5 10 15

Trp Lys Ser His Arg Tyr Phe Val Phe Phe Ser Pro Cys Pro Phe Leu 20 25 30

Tyr Pro Gln Leu Leu Glu His Ser Leu Glu His Ser Lys Cys Ser Val
35 40 45

Leu Phe Met Glu 50

<210> 77

<211> 319

<212> PRT

<213> Homo sapiens

<400> 77

Met Ser Trp Cys Cys Leu Trp Leu Cys Leu Ser Ser Val Gly Arg Thr 1 5 10 15

Gly Ser Ala Gly Pro Ser Leu Pro Phe Ser Glu Leu Cys Ser Leu Gly
20 25 30

Leu Leu Arg Leu Arg Pro Val Phe Ser Pro Leu His Ser Gly Pro Gly 35 40 45

Lys Pro Ala Gln Phe Leu Ala Gly Glu Ala Glu Glu Val Asn Ala Phe 50 55 60

Ala 65	Leu	Gly	Phe	Leu	Ser 70	Thr	Ser	Ser	Gly	Val 75	Ser	Gly	Glu	Asp	Glu 80
Val	Glu	Pro	Leu	His 85	Asp	Gly	Val	Glu	Glu 90	Ala	Glu	Lys	Lys	Met 95	Glu
Glu	Glu	Gly	Val 100	Ser	Val	Ser	Glu	Met 105	Glu	Ala	Thr	Gly	Ala 110	Gln	Gly
Pro	Ser	Arg 115	Val	Glu	Glu	Ala	Glu 120	Gly	His	Thr	Glu	Val 125	Thr	Glu	Ala
Glu	Gly 130	Ser	Gln	Gly	Thr	Ala 135	Glu	Ala	Asp	Gly	Pro 140	Gly	Ala	Ser	Ser
Gly 145	Asp	Glu	Asp	Ala	Ser 150	Gly	Arg	Ala	Ala	Ser 155	Pro	Glu	Ser	Ala	Ser 160
Ser	Thr	Pro	Glu	Ser 165	Leu	Gln	Ala	Arg	Arg 170	His	His	Gln	Phe	Leu 175	Glu
Pro	Ala	Pro	Ala 180	Pro	Gly	Ala	Ala	Val 185	Leu	Ser	Ser	Glu	Pro 190	Ala	Glu
Pro	Leu	Leu 195	Val	Arg	His	Pro	Pro 200	Arg	Pro	Arg	Thr	Thr 205	Gly	Pro	Arg
Pro	Arg 210	Gln	Asp	Pro	His	Lys 215	Ala	Gly	Leu	Ser	His 220	Tyr	Val	Lys	Leu
Phe 225	Ser	Phe	Tyr	Ala	Lys 230	Met	Pro	Met	Glu	Arg 235	Lys	Ala	Leu	Glu	Met 240
Val	Glu	Lys	Cys	Leu 245	Asp	Lys	Tyr	Phe	Gln 250	His	Leu	Cys	Asp	Asp 255	Leu
Glu	Val	Phe	Ala 260	Ala	His	Ala	Gly	Arg 265	Lys	Thr	Val	Lys	Pro 270	Glu	Asp
Leu	Glu	Leu 275	Leu	Met	Arg	Arg	Gln 280	Gly	Leu	Val	Thr	Asp 285	Gln	Val	Ser
Leu	His 290	Val	Leu	Val	Glu	Arg 295	His	Leu	Pro	Leu	Glu 300	Tyr	Arg	Gln	Leu
Leu 305	Ile	Pro	Cys	Ala	Tyr 310	Ser	Gly	Asn	Ser	Val 315	Phe	Pro	Ala	Gln 319	

<210> 78

<211> 171

<212> PRT

<213> Homo sapiens

<400> 78

Met Ser Leu Pro Ile Pro Trp Leu Ser Leu Pro Pro Cys Pro Ile Leu 1 5 10 15

```
Gly Gln Pro Ala Gly Leu Leu Trp Leu Phe Arg Pro Phe Ser Gln
20 25 30
```

Cys Cys Gln Cys Pro Trp Glu Gly Arg Ala Ser Leu Arg His Pro Asn 35 40 45

Gly Pro Ser Gly Cys Arg Glu Ala Glu Ala Trp Pro Gln Arg Ser Leu 50 60

Leu Arg Gln Gln Leu Gln Gln Ala His Pro Leu Pro Thr Leu Pro Thr 65 70 75 80

Pro Glu Arg Leu Pro Glu Gln Met Leu Phe Pro Ser Ser Ser Lys
85 90 95

Pro Phe Ser Leu Leu Ser Leu Thr Ile Trp Ala Arg Leu Val Gly Arg
100 105 110

Leu Thr Asn Arg Ile Cys Pro Val Pro Pro Gly Ser Val Ala Ser Ser 115 120 125

Met Ser Leu Gln Ala Gly Arg Cys Gly Asn Pro Val Val Leu Pro Gln 130 135 140

Pro Met Pro Pro Gly Leu Leu Cys Met Asn Glu Cys Ser Leu Val Pro 145 150 155 160

Gly Leu Gly Arg Gly Gln Val Asn Ser Arg Val 165 170

<210> 79

<211> 60

<212> PRT

<213> Homo sapiens

<400> 79

Met Val Ser Arg Ser Thr Ser Leu Thr Leu Ile Val Phe Leu Phe His 1 5 10 15

Arg Leu Ser Lys Ala Pro Gly Lys Met Val Glu Asn Ser Pro Ser Pro 20 25 30

Leu Pro Glu Arg Ala Ile Tyr Gly Phe Val Leu Phe Leu Ser Ser Gln 35 40 45

Phe Gly Phe Lys Asn Leu Lys Gly Ser Arg Val Cys 50 55 60

<210> 80

<211> 100

<212> PRT

<213> Homo sapiens

<220>

<221> MISC_FEATURE

<222> (20)

<223> Xaa equals any of the naturally occurring L-amino acids

```
<220>
```

<221> MISC_FEATURE

<222> (37)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 80

Met Leu Pro Ser Ala Trp Gly Pro Leu Gln Val Ala Ser Phe Phe Leu 1 5 10 15

Leu Ser Phe Xaa Phe Cys Phe Leu Ser Ser Ser Pro His Leu Gly Arg
20 25 30

Gln Glu Thr His Xaa Val Val Leu Glu Asp Asp Glu Gly Ala Pro Cys 35 40 45

Pro Ala Glu Asp Glu Leu Ala Leu Gln Asp Asn Gly Phe Leu Ser Lys 50 55 60

Asn Glu Val Leu Arg Thr Arg Cys Leu Gly Ser Arg Ser Gly Ser Ala 65 70 75 80

Ser Ala Thr Pro Pro Thr Thr Ser Gly Thr Ala Arg Ala Ala Arg Pro 85 90 95

Pro Ser Gln Cys

<210> 81

<211> 97

<212> PRT

<213> Homo sapiens

<400> 81

Met Ala Leu Leu Ala Leu Ala Ser Ala Val Pro Ser Ala Leu Leu Ala 1 5 10 15

Leu Ala Val Phe Arg Val Pro Ala Trp Ala Cys Leu Leu Cys Phe Thr
20 25 30

Thr Tyr Ser Glu Arg Leu Arg Ile Cys Gln Met Phe Val Gly Met Arg 35 40 45

Ser Pro Ser Leu Lys Ser Val Arg Pro Ser Arg Pro Pro Ser Arg 50 55 60

Ala Ser Leu Thr Pro Lys Ser Val Arg Pro Ser Thr Leu His Gln 65 70 75 80

Cys Pro Gly Glu Gly Ala Glu Gly Gln Glu Arg Pro Arg Gly Ser 85 90 95

Gly

<210> 82

<211> 52

<212> PRT

```
<213> Homo sapiens
<400> 82
Met Trp Leu Asn Phe Ser Asp Val His Thr Tyr Leu Ser Ser Ile Ala
Leu Cys Phe Cys Leu Ser Gly Val Leu Cys Cys Ile Cys Asn Asn
             20
Ser Val Phe His Ile Gln Gln Tyr Ile Leu Ile Ile Ile Thr Phe Pro
                             40
Leu Val Val Ile
     50
<210> 83
<211> 40
<212> PRT
<213> Homo sapiens
```

Met Ser His Ala Ser Arg Lys Thr Lys His Phe Pro Pro Leu Leu Gln

10

25

30

Asn Pro Phe Leu Met Leu Thr Leu Leu Thr Met Ala Val Ser Ala Gln 25

Pro Leu Pro Phe Ser Arg Pro Arg

<210> 84 <211> 132 <212> PRT <213> Homo sapiens <220> <221> MISC FEATURE

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 84

<222> (122)

Met Ala Ala Ala Val Ala Ala Ala Leu Ala Arg Leu Leu Ala Ala Phe

Leu Leu Leu Ala Ala Gln Val Ala Cys Glu Tyr Gly Met Val His Val 20

Val Ser Gln Ala Gly Gly Pro Glu Gly Lys Asp Tyr Cys Ile Leu Tyr

Asn Pro Gln Trp Ala His Leu Pro His Asp Leu Ser Lys Ala Ser Phe

Leu Gln Leu Arg Asn Trp Thr Ala Ser Leu Leu Cys Ser Ala Ala Asp

Leu Pro Ala Arg Gly Phe Ser Asn Gln Ile Pro Leu Val Ala Arg Gly 85 90

```
Asn Cys Thr Phe Tyr Glu Lys Val Arg Leu Ala Gln Gly Ser Gly His
Ala Gly Cys Ser Ser Ser Ala Gly Arg Xaa Trp Ser Pro Arg Gly Val
        115
                            120
Ile Arg Arg Ile
    130
<210> 85
<211> 11
<212> PRT
<213> Homo sapiens
<400> 85
His Ser Ser Leu Pro His Phe Ser Ser Arg Ile
<210> 86
<211> 22
<212> PRT
<213> Homo sapiens
<400> 86
Arg Asp Ser Asn Gly Arg Gly Asp Ser Ser Leu Leu Lys Phe Val Cys
                                     10
Pro Val Pro Leu Lys Lys
            20
<210> 87
<211> 12
<212> PRT
<213> Homo sapiens
<400> 87
Ile Pro Glu Tyr Thr Phe Arg Arg Trp Phe His
<210> 88
<211> 17
<212> PRT
<213> Homo sapiens
Leu Cys Val Ser Met Lys Ile Glu Trp Gly Arg Glu Ser Cys Glu Lys
Lys
<210> 89
<211> 25
<212> PRT
```

<213> Homo sapiens

<400> 89

Arg Leu Lys Thr Thr Arg Ala Tyr Ser Ser Gln Phe Trp Arg Pro Glu 1 5 10 15

Val Gln Asn Gln Gly Val Arg Lys Val 20 25

<210> 90

<211> 165

<212> PRT

<213> Homo sapiens

<400> 90

Leu Thr Leu Cys Leu Pro Arg Ser Leu Tyr Ala Leu Pro Gln Cys Pro
1 5 10 15

Gly Pro His Val His Pro Cys Pro Ala Leu Leu Trp Asp Arg Ala Gly
20 25 30

Leu Pro Leu Pro Leu Pro Gly Cys Ile His Gly Arg Ser Gln Val Pro
35 40 45

Trp His Glu Leu His Ser Pro Ala Ala Phe Asn Gln Gly Met Met Gly 50 55 60

Met Cys Thr Tyr Pro Thr Pro Pro Leu Gly Arg Val Met Leu Arg Cys 65 70 75 80

Gly Phe Leu Thr Val Pro Arg Leu Ser Gln Glu Ala Trp Val Trp Val
85 90 95

Pro Thr Val Gly Ala Gly Val Ile Ser Tyr Leu Arg Arg Pro Pro Phe 100 105 110

Leu Pro Val Leu Cys Ala Pro Thr Pro Thr Leu Glu Leu Pro Arg Phe
115 120 125

Ser Val Phe Val Lys Glu Leu Thr Leu Cys Cys Leu Pro Leu Ser Gln 130 135 140

Cys Pro Cys His Ser Cys Glu Pro Ala Ala Gly Glu Val Gly Ala Asp 145 150 155 160

Leu Cys Val Ala Gly 165

<210> 91

<211> 41

<212> PRT

<213> Homo sapiens

<400> 91

Leu Thr Leu Cys Leu Pro Arg Ser Leu Tyr Ala Leu Pro Gln Cys Pro 1 10 15

Gly Pro His Val His Pro Cys Pro Ala Leu Leu Trp Asp Arg Ala Gly

20 25 30

Leu Pro Leu Pro Leu Pro Gly Cys Ile 35 40

<210> 92

<211> 38

<212> PRT

<213> Homo sapiens

<400> 92

His Gly Arg Ser Gln Val Pro Trp His Glu Leu His Ser Pro Ala Ala 1 5 10 15

Phe Asn Gln Gly Met Met Gly Met Cys Thr Tyr Pro Thr Pro Pro Leu 20 25 30

Gly Arg Val Met Leu Arg 35

<210> 93

<211> 41

<212> PRT

<213> Homo sapiens

<400> 93

Cys Gly Phe Leu Thr Val Pro Arg Leu Ser Gln Glu Ala Trp Val Trp

1 10 15

Val Pro Thr Val Gly Ala Gly Val Ile Ser Tyr Leu Arg Arg Pro Pro 20 25 30

Phe Leu Pro Val Leu Cys Ala Pro Thr 35 40

<210> 94

<211> 45

<212> PRT

<213> Homo sapiens

<400> 94

Pro Thr Leu Glu Leu Pro Arg Phe Ser Val Phe Val Lys Glu Leu Thr 1 5 10 15

Leu Cys Cys Leu Pro Leu Ser Gln Cys Pro Cys His Ser Cys Glu Pro
20 25 30

Ala Ala Gly Glu Val Gly Ala Asp Leu Cys Val Ala Gly
35 40 45

<210> 95

<211> 38

<212> PRT

<213> Homo sapiens

<400> 95

Ile Arg His Glu Thr Phe Arg Val Arg Gly Cys Ser Ile Ser Arg Ala

1 10 15

Leu Ser Pro Phe Pro Leu Pro Phe Pro His Pro Gly Arg Ser Gly Trp
20 25 30

Ser Gly Pro Glu Ala Lys 35

<210> 96

<211> 145

<212> PRT

<213> Homo sapiens

<400> 96

Pro Asp Ser Arg Pro Glu Ala Arg Gly Asp His Val Val Arg Pro Ser 1 10 15

Arg Gly Leu Arg Val Thr Gly Ala Thr Arg Ser Ile Met Gly Pro Trp
20 25 30

Gly Glu Pro Glu Leu Leu Val Trp Arg Pro Glu Ala Val Ala Ser Glu 35 40 45

Pro Pro Val Pro Val Gly Leu Glu Val Lys Leu Gly Ala Leu Val Leu 50 55 60

Leu Leu Val Leu Thr Leu Leu Cys Ser Leu Val Pro Ile Cys Val Leu 65 70 75 80

Arg Arg Pro Gly Ala Asn His Glu Gly Ser Ala Ser Arg Gln Lys Ala 85 90 95

Leu Ser Leu Val Ser Cys Phe Ala Gly Gly Val Phe Leu Ala Thr Cys 100 105 110

Leu Leu Asp Leu Leu Pro Asp Tyr Leu Ala Ala Ile Asp Glu Ala Leu 115 120 125

Ala Ala Leu His Val Thr Leu Gln Phe Pro Leu Gln Glu Phe Ile Leu 130 135 140

Ala

145

<210> 97

<211> 35

<212> PRT

<213> Homo sapiens

<400> 97

Pro Asp Ser Arg Pro Glu Ala Arg Gly Asp His Val Val Arg Pro Ser 1 5 10 15

Arg Gly Leu Arg Val Thr Gly Ala Thr Arg Ser Ile Met Gly Pro Trp
20 25 30

Gly Glu Pro

```
<210> 98
<211> 37
<212> PRT
<213> Homo sapiens
Glu Leu Leu Val Trp Arg Pro Glu Ala Val Ala Ser Glu Pro Pro Val
Pro Val Gly Leu Glu Val Lys Leu Gly Ala Leu Val Leu Leu Val
                                 25
Leu Thr Leu Leu Cys
        35
<210> 99
<211> 36
<212> PRT
<213> Homo sapiens
<400> 99
Ser Leu Val Pro Ile Cys Val Leu Arg Arg Pro Gly Ala Asn His Glu
Gly Ser Ala Ser Arg Gln Lys Ala Leu Ser Leu Val Ser Cys Phe Ala
                                 25
Gly Gly Val Phe
        35
<210> 100
<211> 37
<212> PRT
<213> Homo sapiens
<400> 100
Leu Ala Thr Cys Leu Leu Asp Leu Pro Asp Tyr Leu Ala Ile
Asp Glu Ala Leu Ala Leu His Val Thr Leu Gln Phe Pro Leu Gln
                                25
Glu Phe Ile Leu Ala
        35
<210> 101
<211> 28
<212> PRT
<213> Homo sapiens
<400> 101
Lys Tyr Ile Leu Ser Ser Pro Leu Leu Asp Ser Leu Ala Glu His Lys
```

10

```
Asn Leu Val Trp Lys Ser Phe Leu Pro Arg Asn Phe 20 25
```

<210> 102 <211> 70 <212> PRT <213> Homo sapiens <220> <221> MISC_FEATURE <222> (53) <223> Xaa equals any of the naturally occurring L-amino acids Tyr Gly Lys Val Val Asp Leu Ala Pro Leu His Leu Asp Ala Arg Ile Ser Leu Ser Thr Leu Gln Gln Gln Leu Gly Gln Pro Glu Lys Ala Leu Glu Ala Leu Glu Pro Met Tyr Asp Pro Asp Thr Leu Ala Gln Asp Ala Asn Ala Ala Gln Xaa Glu Leu Lys Leu Leu His Arg Ser Thr Leu Leu Phe Ser Gln Gly Lys 65 <210> 103 <211> 96 <212> PRT <213> Homo sapiens <220> <221> MISC_FEATURE <222> (58) <223> Xaa equals any of the naturally occurring L-amino acids <400> 103 Asp Phe Met Glu Thr Phe Pro Asp Phe Cys Leu Pro Leu Ala Pro His Tyr Leu Gly Lys Ala Ala Leu Trp Ala Met Cys Pro Gly Arg Ala Trp Ala Gly Cys Gly Pro Val Leu Arg Thr Ser His Leu Gly Pro His Ser Ala Leu Pro Ser Trp Cys Asn Ile Cys Xaa Gln Ala Ile Val Gly Ala Gly Arg Gln Arg Gly Leu Ser Glu Asp Pro Thr Cys Ala Ser His Trp

Asp Thr Lys Thr Gly Leu Val Pro Ser Cys Gly Ala Gly Lys Gly Ile

<210> 104

<211> 44

<212> PRT

<213> Homo sapiens

<400> 104

Asp Phe Met Glu Thr Phe Pro Asp Phe Cys Leu Pro Leu Ala Pro His 1 5 10 15

Tyr Leu Gly Lys Ala Ala Leu Trp Ala Met Cys Pro Gly Arg Ala Trp
20 25 30

Ala Gly Cys Gly Pro Val Leu Arg Thr Ser His Leu 35 40

<210> 105

<211> 52

<212> PRT

<213> Homo sapiens

<220>

<221> MISC_FEATURE

<222> (14)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 105

Gly Pro His Ser Ala Leu Pro Ser Trp Cys Asn Ile Cys Xaa Gln Ala 1 5 10 15

Ile Val Gly Ala Gly Arg Gln Arg Gly Leu Ser Glu Asp Pro Thr Cys
20 25 30

Ala Ser His Trp Asp Thr Lys Thr Gly Leu Val Pro Ser Cys Gly Ala 35 40 45

Gly Lys Gly Ile 50

<210> 106

<211> 280

<212> PRT

<213> Homo sapiens

<400> 106

Arg Leu Pro Gln Arg Gly Gln Trp Ala Trp Val Leu Gln Asp Ala Leu

1 10 15

Gly Ile Ala Phe Cys Leu Tyr Met Leu Lys Thr Ile Arg Leu Pro Thr 20 25 30

Phe Lys Ala Cys Thr Leu Leu Leu Leu Val Leu Phe Leu Tyr Asp Ile 35 40 45

Phe Phe Val Phe Ile Thr Pro Phe Leu Thr Lys Ser Gly Ser Ser Ile

50 55 60

Met Val Glu Val Ala Thr Gly Pro Ser Asp Ser Ala Thr Arg Glu Lys
65 70 75 80

Leu Pro Met Val Leu Lys Val Pro Arg Leu Asn Ser Ser Pro Leu Ala 85 90 95

Leu Cys Asp Arg Pro Phe Ser Leu Leu Gly Phe Gly Asp Ile Leu Val
100 105 110

Pro Gly Leu Leu Val Ala Tyr Cys His Arg Phe Asp Ile Gln Val Gln
115 120 125

Ser Ser Arg Val Tyr Phe Val Ala Cys Thr Ile Ala Tyr Gly Val Gly 130 135 140

Leu Leu Val Thr Phe Val Ala Leu Ala Leu Met Gln Arg Gly Gln Pro 145 150 155 160

Ala Leu Leu Tyr Leu Val Pro Cys Thr Leu Val Thr Ser Cys Ala Val 165 170 175

Ala Leu Trp Arg Arg Glu Leu Gly Val Phe Trp Thr Gly Ser Gly Phe
180 185 190

Ala Lys Val Leu Pro Pro Ser Pro Trp Ala Pro Ala Pro Ala Asp Gly
195 200 205

Pro Gln Pro Pro Lys Asp Ser Ala Thr Pro Leu Ser Pro Gln Pro Pro 210 225 220

Ser Glu Glu Pro Ala Thr Ser Pro Trp Pro Ala Glu Gln Ser Pro Lys 225 230 235 240

Ser Arg Thr Ser Glu Glu Met Gly Ala Gly Ala Pro Met Arg Glu Pro 245 250 255

Gly Ser Pro Ala Glu Ser Glu Gly Arg Asp Gln Ala Gln Pro Ser Pro
260 265 270

Val Thr Gln Pro Gly Ala Ser Ala 275 280

<210> 107

<211> 43

<212> PRT

<213> Homo sapiens

<400> 107

Arg Leu Pro Gln Arg Gly Gln Trp Ala Trp Val Leu Gln Asp Ala Leu 1 5 15

Gly Ile Ala Phe Cys Leu Tyr Met Leu Lys Thr Ile Arg Leu Pro Thr
20 25 30

Phe Lys Ala Cys Thr Leu Leu Leu Leu Val Leu
35 40

```
<210> 108
<211> 44
<212> PRT
<213> Homo sapiens
<400> 108
Phe Leu Tyr Asp Ile Phe Phe Val Phe Ile Thr Pro Phe Leu Thr Lys
Ser Gly Ser Ser Ile Met Val Glu Val Ala Thr Gly Pro Ser Asp Ser
                                 25
Ala Thr Arg Glu Lys Leu Pro Met Val Leu Lys Val
<210> 109
<211> 44
<212> PRT
<213> Homo sapiens
<400> 109
Pro Arg Leu Asn Ser Ser Pro Leu Ala Leu Cys Asp Arg Pro Phe Ser
Leu Leu Gly Phe Gly Asp Ile Leu Val Pro Gly Leu Leu Val Ala Tyr
                                 25
Cys His Arg Phe Asp Ile Gln Val Gln Ser Ser Arg
<210> 110
<211> 43
<212> PRT
<213> Homo sapiens
<400> 110
Val Tyr Phe Val Ala Cys Thr Ile Ala Tyr Gly Val Gly Leu Leu Val
Thr Phe Val Ala Leu Ala Leu Met Gln Arg Gly Gln Pro Ala Leu Leu
Tyr Leu Val Pro Cys Thr Leu Val Thr Ser Cys
```

<210> 111

<211> 40

<212> PRT

<213> Homo sapiens

<400> 111

Ala Val Ala Leu Trp Arg Glu Leu Gly Val Phe Trp Thr Gly Ser
1 5 10 15

Gly Phe Ala Lys Val Leu Pro Pro Ser Pro Trp Ala Pro Ala Pro Ala 20 25 30

```
Asp Gly Pro Gln Pro Pro Lys Asp
         35
<210> 112
<211> 41
<212> PRT
<213> Homo sapiens
<400> 112
Ser Ala Thr Pro Leu Ser Pro Gln Pro Pro Ser Glu Glu Pro Ala Thr
                                     10
Ser Pro Trp Pro Ala Glu Gln Ser Pro Lys Ser Arg Thr Ser Glu Glu
             20
                                 25
Met Gly Ala Gly Ala Pro Met Arg Glu
<210> 113
<211> 25
<212> PRT
<213> Homo sapiens
<400> 113
Pro Gly Ser Pro Ala Glu Ser Glu Gly Arg Asp Gln Ala Gln Pro Ser
Pro Val Thr Gln Pro Gly Ala Ser Ala
             20
<210> 114
<211> 26
<212> PRT
<213> Homo sapiens
<400> 114
Glu Ser Ser Gly Leu Pro Ala Leu Gly Pro Arg Arg Pro Trp Glu
Gln Arg Trp Ser Asp Pro Ile Thr Leu Lys
             20
<210> 115
<211> 61
<212> PRT
<213> Homo sapiens
<400> 115
Leu Thr Leu Ala Leu Asp Glu Ile Arg Leu Leu Lys Lys Asp Leu Gly
Leu Ile Glu Met Lys Lys Thr Asp Ser Glu Lys Arg Phe Gly Ser Val
             20
                                                      30
```

Ser Phe Gly Arg Ser Cys Arg Leu Ile Pro His Ala Leu Ala Ser Trp

35 40 45

Leu Gln Thr Leu Ile Leu Cys Phe Cys Cys Arg Ile Cys
50 55 60

<210> 116

<211> 32

<212> PRT

<213> Homo sapiens

<220>

<221> MISC FEATURE

<222> (27)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 116

Gly Arg Pro Thr Arg Pro Val Met Ala Ile Gln Ser Leu His Pro Cys
1 10 15

Pro Ser Glu Leu Cys Cys Arg Ala Cys Val Xaa Phe Tyr His Trp Ala 20 25 30

<210> 117

<211> 29

<212> PRT

<213> Homo sapiens

<400> 117

Asn Ser Lys Asn Thr Arg Asn Glu Arg Ser Phe Leu Lys Leu Phe Arg 1 5 10 15

Asn Ile His Asp Ile Pro Leu Thr Val Leu Glu Asn Lys
20 25

<210> 118

<211> 20

<212> PRT

<213> Homo sapiens

<400> 118

Pro Arg Val Arg Gly Glu Gly Asn Arg Cys Trp Thr Gln Gly Ala Leu

1 10 15

Cys His Arg Met

20

<210> 119

<211> 421

<212> PRT

<213> Homo sapiens

<400> 119

Pro Arg Val Arg Gly Glu Gly Asn Arg Cys Trp Thr Gln Gly Ala Leu

Cys	His	Arg	Met 20	Met	Val	Ala	Leu	Arg 25	Gly	Ala	Ser	Ala	Leu 30	Leu	Val
Leu	Phe	Leu 35	Ala	Ala	Phe	Leu	Pro 40	Pro	Pro	Gln	Cys	Thr 45	Gln	Asp	Pro
Ala	Met 50	Val	His	Tyr	Ile	Tyr 55	Gln	Arg	Phe	Arg	Val 60	Leu	Glu	Gln	Gly
Leu 65	Glu	Lys	Cys	Thr	Gln 70	Ala	Thr	Arg	Ala	Tyr 75	Ile	Gln	Glu	Phe	Gln 80
Glu	Phe	Ser	Lys	Asn 85	Ile	Ser	Val	Met	Leu 90	Gly	Arg	Cys	Gln	Thr 95	Tyr
Thr	Ser	Glu	Tyr 100	Lys	Ser	Ala	Val	Gly 105	Asn	Leu	Ala	Leu	Arg 110	Val	Glu
Arg	Ala	Gln 115	Arg	Glu	Ile	Asp	Tyr 120	Ile	Gln	Tyr	Leu	Arg 125	Glu	Ala	Asp
Glu	Cys 130	Ile	Glu	Ser	Glu	Asp 135	Lys	Thr	Leu	Ala	Glu 140	Met	Leu	Leu	Gln
Glu 145	Ala	Glu	Glu	Glu	Lys 150	Lys	Ile	Arg	Thr	Leu 155	Leu	Asn	Ala	Ser	Cys 160
Asp	Asn	Met	Leu	Met 165	Gly	Ile	Lys	Ser	Leu 170	Lys	Ile	Val	Lys	Lys 175	Met
Met	Asp	Thr	His 180	Gly	Ser	Trp	Met	Lys 185	Asp	Ala	Val	Tyr	Asn 190	Ser	Pro
Lys	Val	Tyr 195	Leu	Leu	Ile	Gly	Ser 200	Arg	Asn	Asn	Thr	Val 205	Trp	Glu	Phe
Ala	Asn 210	Ile	Arg	Ala	Phe	Met 215	Glu	Asp	Asn	Thr	Lys 220	Pro	Ala	Pro	Arg
Lys 225	Gln	Ile	Leu	Thr	Leu 230	Ser	Trp	Gln	Gly	Thr 235	Gly	Gln	Val	Ile	Tyr 240
Lys	Gly	Phe	Leu	Phe 245	Phe	His	Asn	Gln	Ala 250	Thr	Ser	Asn	Glu	Ile 255	Ile
Lys	Tyr	Asn	Leu 260	Gln	Lys	Arg	Thr	Val 265	Glu	Asp	Arg	Met	Leu 270	Leu	Pro
Gly	Gly	Val 275	Gly	Arg	Ala	Leu	Val 280	Tyr	Gln	His	Ser	Pro 285	Ser	Thr	Tyr
Ile	Asp 290	Leu	Ala	Val	Asp	Glu 295	His	Gly	Leu	Trp	Ala 300	Ile	His	Ser	Gly

Pro Gly Thr His Ser His Leu Val Leu Thr Lys Ile Glu Pro Gly Thr

Leu Gly Val Glu His Ser Trp Asp Thr Pro Cys Arg Ser Gln Asp Ala

325 330 335

Glu Ala Ser Phe Leu Leu Cys Gly Val Leu Tyr Val Val Tyr Ser Thr 340 345 350

Gly Gly Gln Gly Pro His Arg Ile Thr Cys Ile Tyr Asp Pro Leu Gly 355 360 365

Thr Ile Ser Glu Glu Asp Leu Pro Asn Leu Phe Phe Pro Lys Arg Pro 370 375 380

Arg Ser His Ser Met Ile His Tyr Asn Pro Arg Asp Lys Gln Leu Tyr 385 390 395 400

Ala Trp Asn Glu Gly Asn Gln Ile Ile Tyr Lys Leu Gln Thr Lys Arg 405 410 415

Lys Leu Thr Leu Lys 420

<210> 120

<211> 27

<212> PRT

<213> Homo sapiens

<400> 120

Phe Pro Cys Ile Cys Leu Ser Gly Leu Leu Asp Leu Leu Ile Trp Arg

1 5 10 15

Pro Phe Ser Glu Glu Leu Thr Lys Thr Phe Gly

<210> 121

<211> 84

<212> PRT

<213> Homo sapiens

<400> 121

Phe Pro Cys Ile Cys Leu Ser Gly Leu Leu Asp Leu Leu Ile Trp Arg

1 5 10 15

Pro Phe Ser Glu Glu Leu Thr Lys Thr Phe Gly Met Val Ser Leu Leu 20 25 30

Ser Ser Tyr Leu Leu Leu Leu Glu Leu Leu Ser Lys Arg Ser Leu Phe 35 40 45

Leu Gln Trp Tyr Leu Phe Phe Gly Leu Gln Cys Cys Ser Ser Phe Leu 50 55 60

Cys Arg Lys Asn Glu Ser Gln Cys Phe Thr Arg Leu Lys Glu Arg Ser 65 70 75 80

Ala Gly Ser Val

```
<211> 24
<212> PRT
<213> Homo sapiens
<220>
<221> MISC_FEATURE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> MISC_FEATURE
<222> (24)
<223> Xaa equals any of the naturally occurring L-amino acids
Lys Asp Thr Cys Thr Arg Met Xaa Ile Ala Ala Leu Phe Thr Ile Ala
                                      10
Lys Ile Trp Asn Gln Pro Lys Xaa
             20
<210> 123
<211> 45
<212> PRT
<213> Homo sapiens
<220>
<221> MISC FEATURE
<222> (24)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> MISC FEATURE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 123
Arg His Met His Thr Tyr Val Tyr Cys Gly Thr Ile His Asn Ser Lys
Asp Leu Glu Pro Thr Gln Met Xaa Asp Xaa Ile Lys Lys Met Trp His
Leu Tyr Thr Thr Lys Tyr Tyr Ala Ala Ile Lys Lys Asp
<210> 124
<211> 14
<212> PRT
<213> Homo sapiens
<400> 124
Arg Lys Cys Gly Thr Tyr Ile Pro Arg Asn Thr Met Gln Pro
<210> 125
<211> 40
```

```
<212> PRT
<213> Homo sapiens
<220>
<221> MISC_FEATURE
<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids
Lys Arg Thr Glu Phe Met Ser Phe Xaa Gly Thr Trp Met Lys Leu Glu
Ala Ile Ile Leu Ser Lys Leu Thr Gln Glu Glu Lys Thr Lys His Leu
             20
                                                      30
Met Phe Ser Leu Ile Ser Gly Ser
<210> 126
<211> 11
<212> PRT
<213> Homo sapiens
<400> 126
Pro Lys Ser Asp Thr Ser Pro Ala Ser Ser Arg
<210> 127
<211> 15
<212> PRT
<213> Homo sapiens
<400> 127
Pro Lys Ser Asp Thr Ser Pro Ala Ser Ser Arg Leu Cys Trp Asp
<210> 128
<211> 270
<212> PRT
<213> Homo sapiens
<400> 128
Tyr Val Pro Ser Phe Leu Pro Lys Ala Thr Gly Ser Ile Pro Ser Arg
Lys Gly Gly Val Gly Ser Glu Lys Pro Glu Val Pro Leu Gln Thr Tyr
Lys Glu Ile Val His Cys Cys Glu Glu Gln Val Leu Thr Leu Ala Thr
Glu Gln Thr Tyr Ala Val Glu Gly Glu Thr Pro Ile Asn Arg Leu Ser
Leu Leu Ser Gly Arg Val Arg Val Ser Gln Asp Gly Gln Phe Leu
```

His Tyr Ile Phe Pro Tyr Gln Phe Met Asp Ser Pro Glu Trp Glu Ser 85 90 95

Leu Gln Pro Ser Glu Glu Gly Val Phe Gln Val Thr Leu Thr Ala Glu
100 105 110

Thr Ser Cys Ser Tyr Ile Ser Trp Pro Arg Lys Ser Leu His Leu Leu 115 120 125

Leu Thr Lys Glu Arg Tyr Ile Ser Cys Leu Phe Ser Ala Leu Leu Gly 130 135 140

Tyr Asp Ile Ser Glu Lys Leu Tyr Thr Leu Asn Asp Lys Leu Phe Ala 145 150 155 160

Lys Phe Gly Leu Arg Phe Asp Ile Arg Leu Pro Ser Leu Tyr His Val 165 170 175

Leu Gly Pro Thr Ala Ala Asp Ala Gly Pro Glu Ser Glu Lys Gly Asp 180 185 190

Glu Glu Val Cys Glu Pro Ala Val Ser Pro Pro Gln Ala Thr Pro Thr
195 200 205

Ser Leu Gln Gln Thr Pro Pro Cys Ser Thr Pro Pro Ala Thr Thr Asn 210 215 220

Phe Pro Ala Pro Pro Thr Arg Ala Arg Leu Ser Arg Pro Asp Ser Gly 225 230 235 240

Ile Leu Ala Ser Arg Ile Pro Leu Gln Ser Tyr Ser Gln Val Ile Ser 245 250 255

Arg Gly Gln Ala Pro Leu Ala Pro Thr His Thr Pro Glu Leu 260 265 270

<210> 129

<211> 21

<212> PRT

<213> Homo sapiens

<400> 129

Ala Thr Gly Ser Ile Pro Ser Arg Lys Gly Gly Val Gly Ser Glu Lys

1 10 15

Pro Glu Val Pro Leu 20

<210> 130

<211> 25

<212> PRT

<213> Homo sapiens

<400> 130

Ile Val His Cys Cys Glu Glu Gln Val Leu Thr Leu Ala Thr Glu Gln 1 5 10 15

Thr Tyr Ala Val Glu Gly Glu Thr Pro

20 25

```
<210> 131
<211> 23
<212> PRT
<213> Homo sapiens
<400> 131
Gln Asp Gly Gln Phe Leu His Tyr Ile Phe Pro Tyr Gln Phe Met Asp
Ser Pro Glu Trp Glu Ser Leu
             20
<210> 132
<211> 23
<212> PRT
<213> Homo sapiens
<400> 132
Thr Leu Thr Ala Glu Thr Ser Cys Ser Tyr Ile Ser Trp Pro Arg Lys
                  5
                                      10
                                                          15
Ser Leu His Leu Leu Thr
             20
<210> 133
<211> 25
<212> PRT
<213> Homo sapiens
<400> 133
Asp Ile Ser Glu Lys Leu Tyr Thr Leu Asn Asp Lys Leu Phe Ala Lys
Phe Gly Leu Arg Phe Asp Ile Arg Leu
             20
<210> 134
<211> 26
<212> PRT
<213> Homo sapiens
<400> 134
Ser Leu Tyr His Val Leu Gly Pro Thr Ala Ala Asp Ala Gly Pro Glu
 1
                 5
Ser Glu Lys Gly Asp Glu Glu Val Cys Glu
             20
<210> 135
<211> 28
<212> PRT
```

<213> Homo sapiens

<400> 135

Thr Thr Asn Phe Pro Ala Pro Pro Thr Arg Ala Arg Leu Ser Arg Pro 1 5 10 15

Asp Ser Gly Ile Leu Ala Ser Arg Ile Pro Leu Gln
20 25

<210> 136

<211> 196

<212> PRT

<213> Homo sapiens

<400> 136

Pro Lys Ser Asp Thr Ser Pro Ala Ser Ser Arg Leu Cys Trp Asp Met

1 10 15

Thr Ser Arg Arg Ser Ser Thr Leu Ser Met Thr Ser Ser Leu Leu Ser 20 25 30

Leu Gly Cys Ala Leu Thr Ser Ala Phe Pro Ala Ser Thr Met Ser Trp
35 40 45

Val Pro Leu Gln Met Leu Asp Gln Ser Pro Arg Arg Val Met Arg
50 55 60

Lys Ser Val Ser Gln Leu Cys Pro Leu Leu Arg Pro His Pro Pro Leu 65 70 75 80

Ser Ser Lys His Pro Leu Val Leu Pro Leu Gln Leu Pro Pro Thr Phe 85 90 95

Leu His Leu Leu Pro Gly Pro Gly Cys Pro Gly Gln Thr Val Ala Tyr 100 105 110

Trp Leu Leu Glu Phe Leu Ser Arg Ala Thr Leu Lys Leu Tyr Pro Gly 115 120 125

Asp Arg Pro Leu Trp Leu Gln Pro Thr Arg Leu Asn Phe Lys Asp His 130 135 140

Trp Thr Ile Phe Ser Val Ala Ser Ala Ala Leu Phe Cys Val His Arg 145 150 155 160

Met Ala Thr Asp Arg His Ala Ser Phe Pro Thr His Trp Lys Ala His
165 170 175

Arg Gln Gly Glu Arg Gly His Arg Cys Gln His Cys Arg Tyr Ser 180 185 190

Lys Asp Leu Lys 195

<210> 137

<211> 10

<212> PRT

<213> Homo sapiens

<400> 137

```
Tyr Phe Ser His Gly Ile Cys Ser His Ala
<210> 138
<211> 55
<212> PRT
<213> Homo sapiens
<400> 138
Asn Ser Glu Asp Ile Ser Gln Thr Arg Gln Glu Leu Gly Leu Cys Ile
                                                          15
Ser Gln Arg Cys Leu Ser Asp Arg Lys Lys Ser Arg Arg Ser Gly Val
                                 25
Trp Val Arg Ala Cys Thr Met Gln Phe Met Lys His Val Phe Pro Arg
         35
Leu Ile Ser Pro Arg Arg Pro
<210> 139
<211> 55
<212> PRT
<213> Homo sapiens
<400> 139
Pro Thr Arg His Phe Cys Gly Thr Ser Ser Cys Leu Thr Gly Thr Ala
Val Arg Cys Arg Ala Pro Ala Pro Val Trp Ser Val Arg Cys Pro His
                                 25
Cys Phe Arg Ser Ser Asp Ala Trp Val Asp Pro Gly Ile Pro Asp Arg
Tyr Leu Gln Ala Tyr Leu Leu
     50
<210> 140
<211> 246
<212> PRT
<213> Homo sapiens
<220>
<221> MISC_FEATURE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 140
Gly Glu Ala Met Asp Ala Glu Xaa Ala Val Ala Pro Pro Gly Cys Ser
His Leu Gly Ser Phe Lys Val Asp Asn Trp Lys Gln Asn Leu Arg Ala
```

Ile Tyr Gln Cys Phe Val Trp Ser Gly Thr Ala Glu Ala Arg Lys Arg

35 40 45

Lys Ala Lys Ser Cys Ile Cys His Val Cys Gly Val His Leu Asn Arg
50 55 60

Leu His Ser Cys Leu Tyr Cys Val Phe Phe Gly Cys Phe Thr Lys Lys 65 70 75 80

His Ile His Glu His Ala Lys Ala Lys Arg His Asn Leu Ala Ile Asp
85 90 95

Leu Met Tyr Gly Gly Ile Tyr Cys Phe Leu Cys Gln Asp Tyr Ile Tyr
100 105 110

Asp Lys Asp Met Glu Ile Ile Ala Lys Glu Glu Gln Arg Lys Ala Trp 115 120 125

Lys Met Gln Gly Val Gly Glu Lys Phe Ser Thr Trp Glu Pro Thr Lys 130 135 140

Arg Glu Leu Glu Leu Lys His Asn Pro Lys Arg Arg Lys Ile Thr 145 150 155 160

Ser Asn Cys Thr Ile Gly Leu Arg Gly Leu Ile Asn Leu Gly Asn Thr 165 170 175

Cys Phe Met Asn Cys Ile Val Gln Ala Leu Thr His Thr Pro Leu Leu 180 185 190

Arg Asp Phe Phe Leu Ser Asp Arg His Arg Cys Glu Met Gln Ser Pro 195 200 205

Ser Ser Cys Leu Val Cys Glu Met Ser Ser Leu Phe Gln Glu Phe Gly 210 215 220

Arg Val Gly Arg Pro Gly Asn Ser Gly Pro Val Pro Ala Gly Val Pro 225 230 235 240

Ser Ile Val Ser Pro Glu 245

<210> 141

<211> 24

<212> PRT

<213> Homo sapiens

<400> 141

Val Ala Pro Pro Gly Cys Ser His Leu Gly Ser Phe Lys Val Asp Asn
1 5 10 15

Trp Lys Gln Asn Leu Arg Ala Ile

<210> 142

<211> 23

<212> PRT

<213> Homo sapiens

```
<400> 142
Thr Ala Glu Ala Arg Lys Arg Lys Ala Lys Ser Cys Ile Cys His Val
                                     10
Cys Gly Val His Leu Asn Arg
             20
<210> 143
<211> 23
<212> PRT
<213> Homo sapiens
<400> 143
Phe Thr Lys Lys His Ile His Glu His Ala Lys Ala Lys Arg His Asn
Leu Ala Ile Asp Leu Met Tyr
<210> 144
<211> 21
<212> PRT
<213> Homo sapiens
<400> 144
Tyr Asp Lys Asp Met Glu Ile Ile Ala Lys Glu Glu Gln Arg Lys Ala
Trp Lys Met Gln Gly
            20
<210> 145
<211> 28
<212> PRT
<213> Homo sapiens
<400> 145
Glu Leu Leu Lys His Asn Pro Lys Arg Arg Lys Ile Thr Ser Asn Cys
Thr Ile Gly Leu Arg Gly Leu Ile Asn Leu Gly Asn
<210> 146
<211> 26
<212> PRT
<213> Homo sapiens
<400> 146
Gly Asn Thr Cys Phe Met Asn Cys Ile Val Gln Ala Leu Thr His Thr
Pro Leu Leu Arg Asp Phe Phe Leu Ser Asp
```

20

```
<210> 147
<211> 20
<212> PRT
<213> Homo sapiens
<400> 147
Glu Phe Gly Arg Val Gly Arg Pro Gly Asn Ser Gly Pro Val Pro Ala
Gly Val Pro Ser
<210> 148
<211> 108
<212> PRT
<213> Homo sapiens
<400> 148
Asn Ser Glu Asp Ile Ser Gln Thr Arg Gln Glu Leu Gly Leu Cys Ile
Ser Gln Arg Cys Leu Ser Asp Arg Lys Ser Arg Arg Ser Gly Val
                                 25
Trp Val Arg Ala Cys Thr Met Gln Phe Met Lys His Val Phe Pro Arg
Leu Ile Ser Pro Arg Arg Pro Met Val Gln Phe Glu Val Ile Phe Leu
Leu Phe Gly Leu Cys Phe Ser Ser Ser Ser Arg Leu Val Gly Ser
Gln Val Glu Asn Phe Ser Pro Thr Pro Cys Ile Phe Gln Ala Phe Arg
                                     90
Cys Ser Ser Leu Ala Ile Ile Ser Met Ser Leu Ser
            100
                                105
<210> 149
<211> 7
<212> PRT
<213> Homo sapiens
<400> 149
Ala Phe Pro Trp Pro Thr Ser
<210> 150
<211> 23
<212> PRT
<213> Homo sapiens
<400> 150
Glu Ser Asn Phe Phe Tyr Pro Tyr Asp Ser Gln Leu Ala Leu Leu Ser
                                     10
```

Ser Val Thr Cys Ser Ala Ser 20

<210> 151

<211> 83

<212> PRT

<213> Homo sapiens

<400> 151

Lys Leu Lys Met Phe Ala Phe Tyr Val Gln Val Leu Asn Gln Ser Lys

1 10 15

Ser Ile Phe Val Tyr Ser Arg Asn Leu Ile Phe Phe Ile His Met Ile 20 25 30

Val Ser Trp Pro Ser Phe Leu Gln Leu Pro Ala Val His Gln Cys His
35 40 45

Gln Ser Ser Val His Ile Cys Gly Val Ser Gly Leu Phe Pro Ser Ser 50 55 60

Asn Tyr Gln Cys Leu Ser Leu Cys Gln Asn His Thr Val Leu Ile Ile 65 70 75 80

Thr Thr Leu

<210> 152

<211> 48

<212> PRT

<213> Homo sapiens

<400> 152

Ser Ile Leu Asn Val Ile Pro Asn Leu Ser Lys Gln Ser Phe Glu Glu 1 5 10 15

Phe Asp Arg Leu Ile Leu Lys Tyr Met Gln Lys Ser Lys Ser Lys Arg 20 25 30

Ile Ala Lys Ile Leu Leu Ser Asn Lys Lys Thr Cys Pro Thr Lys Tyr
35 40 45

<210> 153

<211> 36

<212> PRT

<213> Homo sapiens

<400> 153

Leu Pro Gln Ile Leu Arg Trp Leu Lys Tyr His Gln Ser Val Trp Gly
1 5 10 15

Lys Gln Thr Pro Val Thr Leu His Tyr Leu Thr Leu Asp Leu Ile Gln 20 25 30

Glu Phe Thr Pro 35

<210> 154

<211> 33

<212> PRT

<213> Homo sapiens

<400> 154

Ile Phe Val Tyr Ser Arg Asn Leu Ile Phe Phe Ile His Met Ile Val

1 5 10 15

Ser Trp Pro Ser Phe Leu Gln Leu Pro Ala Val His Gln Cys His Gln 20 25 30

Ser

<210> 155

<211> 184

<212> PRT

<213> Homo sapiens

<400> 155

Pro Thr Gly Asn Asp Leu Val Tyr Val Phe Pro Cys Leu Leu Ser Val 1 5 10 15

Phe Ser Arg Met Glu Glu Pro Ser Val Phe Cys Leu Phe Phe Pro Leu 20 25 30

Ser Ile Leu Ile Ser Ser Ala Ser Arg Thr Phe Pro Gly Thr Gln Gln 35 40 45

Val Phe Ser Ile Val His Gly Val Thr Asp Val Ser Ala Lys Lys Val 50 55 60

Gln Ser Gln Gly Arg Met Thr Ser Thr Gly Leu Asp Phe Asn Leu Leu 65 70 75 80

Pro Ala Trp Phe Pro Ser Pro Thr Ser Leu Gln Pro Thr Glu Asp Leu 85 90 95

Phe Gln Thr Gly Ser Leu Ser Arg Ser Phe Phe Cys Ser Lys Ala Phe
100 105 110

Ser Ser Pro Leu Ser Pro Gly Gly Ser Pro Asn Ala Leu Thr Ser 115 120 125

Val Lys Glu His Leu Val Ser Pro Ala Phe Leu Ala Ser His Ser Cys 130 135 140

Thr Ala Glu Ser Phe Pro Arg Val Asp Val Ile His Ala Val Pro Ile 145 150 155 160

Ala Trp Ile Pro Ala Pro Leu His Pro Ile Gln Leu Ile Asn Ser Trp
165 170 175

Phe Phe Phe Phe Phe Phe

```
<210> 156
<211> 24
<212> PRT
<213> Homo sapiens
<400> 156
Asp Leu Val Tyr Val Phe Pro Cys Leu Leu Ser Val Phe Ser Arg Met
                                     10
Glu Glu Pro Ser Val Phe Cys Leu
             20
<210> 157
<211> 24
<212> PRT
<213> Homo sapiens
<400> 157
Ile Ser Ser Ala Ser Arg Thr Phe Pro Gly Thr Gln Gln Val Phe Ser
                                     10
Ile Val His Gly Val Thr Asp Val
             20
<210> 158
<211> 20
<212> PRT
<213> Homo sapiens
<400> 158
Phe Asn Leu Pro Ala Trp Phe Pro Ser Pro Thr Ser Leu Gln Pro
                                     10
Thr Glu Asp Leu
             20
<210> 159
<211> 25
<212> PRT
<213> Homo sapiens
<400> 159
Phe Cys Ser Lys Ala Phe Ser Ser Pro Leu Ser Pro Gly Gly Ser
Pro Asn Ala Leu Thr Ser Val Lys Glu
             20
<210> 160
<211> 23
<212> PRT
<213> Homo sapiens
```

<400> 160

Thr Ala Glu Ser Phe Pro Arg Val Asp Val Ile His Ala Val Pro Ile
1 5 10 15

Ala Trp Ile Pro Ala Pro Leu 20

<210> 161

<211> 34

<212> PRT

<213> Homo sapiens

<400> 161

Phe Ser Phe Leu Lys Pro Leu Cys Ala Pro Arg Ala Pro Trp Leu Trp

1 10 15

Leu Pro Pro Ser Ser Lys Ser Arg Val His Val Gly Pro Gly Asp Phe
20 25 30

Arg Ser

<210> 162

<211> 122

<212> PRT

<213> Homo sapiens

<220>

<221> MISC FEATURE

<222> (108)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 162

Val Cys Gly Thr Gly Gly Leu Glu Pro Asn Leu Ala Trp Val Arg Val 1 5 10 15

Asp Asn Gly Ser Phe Pro Ser Ser Pro Ser Val Pro Leu Glu His
20 25 30

Pro Gly Cys Gly Cys Leu Leu His Pro Arg Ala Glu Ser Met Leu Gly 35 40 45

Gln Glu Thr Ser Asp Pro Cys Pro Gly Ala Ala Ser Gly Phe Val Phe
50 55 60

Pro Gln Trp Ala Gly Leu Gly Leu Leu Val His Leu Tyr Pro Ser Leu 65 70 75 80

Ser Tyr Ala Ala Leu Ala Cys Cys Val Ser Gly Leu Tyr Ser Leu Pro
85 90 95

Phe Thr Gln Ala Leu Gly Asn Gln Pro Ser Phe Xaa Gln Glu Arg Gln
100 105 110

Arg Arg Ser Met Pro Leu Leu Trp Ala Ser 115 120

```
<210> 163
<211> 8
<212> PRT
<213> Homo sapiens
<400> 163
His Ala Gly Arg Lys Thr Val Lys
<210> 164
<211> 61
<212> PRT
<213> Homo sapiens
<400> 164
Ser Phe Tyr Ala Lys Met Pro Met Glu Arg Lys Ala Leu Glu Met Val
Glu Lys Cys Leu Asp Lys Tyr Phe Gln His Leu Cys Asp Asp Leu Glu
Val Phe Ala Ala His Ala Gly Arg Lys Thr Val Lys Pro Glu Asp Leu
Glu Leu Leu Met Arg Arg Gln Gly Leu Val Thr Asp Gln
                         55
<210> 165
<211> 19
<212> PRT
<213> Homo sapiens
<400> 165
Pro Met Glu Arg Lys Ala Leu Glu Met Val Glu Lys Cys Leu Asp Lys
                                      10
Tyr Phe Gln
<210> 166
<211> 22
<212> PRT
<213> Homo sapiens
Glu Val Phe Ala Ala His Ala Gly Arg Lys Thr Val Lys Pro Glu Asp
Leu Glu Leu Leu Met Arg
<210> 167
<211> 31
<212> PRT
```

<213> Homo sapiens

<400> 167

Ser Phe Pro Ser Ser Ser Pro Ser Val Pro Leu Glu His Pro Gly Cys 1 5 10 15

Gly Cys Leu Leu His Pro Arg Ala Glu Ser Met Leu Gly Gln Glu
20 25 30

<210> 168

<211> 27

<212> PRT

<213> Homo sapiens

<400> 168

Tyr Pro Ser Leu Ser Tyr Ala Ala Leu Ala Cys Cys Val Ser Gly Leu 1 5 10 15

Tyr Ser Leu Pro Phe Thr Gln Ala Leu Gly Asn 20 25

<210> 169

<211> 353

<212> PRT

<213> Homo sapiens

<400> 169

Phe Ser Phe Leu Lys Pro Leu Cys Ala Pro Arg Ala Pro Trp Leu Trp

1 10 15

Leu Pro Pro Ser Ser Lys Ser Arg Val His Val Gly Pro Gly Asp Phe
20 25 30

Arg Ser Met Ser Trp Cys Cys Leu Trp Leu Cys Leu Ser Ser Val Gly 35 40 45

Arg Thr Gly Ser Ala Gly Pro Ser Leu Pro Phe Ser Glu Leu Cys Ser 50 60

Leu Gly Leu Leu Arg Leu Arg Pro Val Phe Ser Pro Leu His Ser Gly 65 70 75 80

Pro Gly Lys Pro Ala Gln Phe Leu Ala Gly Glu Ala Glu Glu Val Asn 85 90 95

Ala Phe Ala Leu Gly Phe Leu Ser Thr Ser Ser Gly Val Ser Gly Glu 100 105 110

Asp Glu Val Glu Pro Leu His Asp Gly Val Glu Glu Ala Glu Lys Lys
115 120 125

Met Glu Glu Glu Gly Val Ser Val Ser Glu Met Glu Ala Thr Gly Ala 130 135 140

Gln Gly Pro Ser Arg Val Glu Glu Ala Glu Gly His Thr Glu Val Thr 145 150 155 160

Glu Ala Glu Gly Ser Gln Gly Thr Ala Glu Ala Asp Gly Pro Gly Ala 165 170 175

```
Ser Ser Gly Asp Glu Asp Ala Ser Gly Arg Ala Ala Ser Pro Glu Ser
180 185 190
```

Ala Ser Ser Thr Pro Glu Ser Leu Gln Ala Arg Arg His His Gln Phe 195 200 205

Leu Glu Pro Ala Pro Ala Pro Gly Ala Ala Val Leu Ser Ser Glu Pro 210 225

Ala Glu Pro Leu Leu Val Arg His Pro Pro Arg Pro Arg Thr Thr Gly 225 230 235 240

Pro Arg Pro Arg Gln Asp Pro His Lys Ala Gly Leu Ser His Tyr Val 245 250 255

Lys Leu Phe Ser Phe Tyr Ala Lys Met Pro Met Glu Arg Lys Ala Leu 260 265 270

Glu Met Val Glu Lys Cys Leu Asp Lys Tyr Phe Gln His Leu Cys Asp 275 280 285

Asp Leu Glu Val Phe Ala Ala His Ala Gly Arg Lys Thr Val Lys Pro 290 295 300

Glu Asp Leu Glu Leu Leu Met Arg Arg Gln Gly Leu Val Thr Asp Gln 305 310 315 320

Val Ser Leu His Val Leu Val Glu Arg His Leu Pro Leu Glu Tyr Arg 325 330 335

Gln Leu Leu Ile Pro Cys Ala Tyr Ser Gly Asn Ser Val Phe Pro Ala 340 345 350

Gln

<210> 170

<211> 27

<212> PRT

<213> Homo sapiens

<220>

<221> MISC FEATURE

<222> (18)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 170

Ala Pro Gly Gly Val Asn Ser Glu Gly Arg Gly Gln His Leu Pro Pro
1 10 15

Pro Xaa Leu Ala Val Cys Leu Lys Leu His Leu

<210> 171

<211> 198

<212> PRT

<213> Homo sapiens

```
<220>
```

<221> MISC_FEATURE

<222> (18)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 171

Ala Pro Gly Gly Val Asn Ser Glu Gly Arg Gly Gln His Leu Pro Pro 1 5 10 15

Pro Xaa Leu Ala Val Cys Leu Lys Leu His Leu Met Ser Leu Pro Ile 20 25 30

Pro Trp Leu Ser Leu Pro Pro Cys Pro Ile Leu Gly Gln Pro Ala Gly 35 40 45

Leu Leu Trp Leu Phe Arg Pro Phe Ser Gln Cys Cys Gln Cys Pro 50 55 60

Trp Glu Gly Arg Ala Ser Leu Arg His Pro Asn Gly Pro Ser Gly Cys
65 70 75 80

Arg Glu Ala Glu Ala Trp Pro Gln Arg Ser Leu Leu Arg Gln Gln Leu 85 90 95

Gln Gln Ala His Pro Leu Pro Thr Leu Pro Thr Pro Glu Arg Leu Pro
100 105 110

Glu Gln Met Leu Phe Pro Ser Ser Ser Ser Lys Pro Phe Ser Leu Leu 115 120 125

Ser Leu Thr Ile Trp Ala Arg Leu Val Gly Arg Leu Thr Asn Arg Ile 130 135 140

Cys Pro Val Pro Pro Gly Ser Val Ala Ser Ser Met Ser Leu Gln Ala 145 150 155 160

Gly Arg Cys Gly Asn Pro Val Val Leu Pro Gln Pro Met Pro Pro Gly
165 170 175

Leu Leu Cys Met Asn Glu Cys Ser Leu Val Pro Gly Leu Gly Arg Gly
180 185 190

Gln Val Asn Ser Arg Val 195

<210> 172

<211> 44

<212> PRT

<213> Homo sapiens

<400> 172

Asn Ser Ala Glu Pro Ala Trp Val Pro Val Cys Ala Arg Gly Gly Gly 1 5 10 15

Ala Gly Cys Gly Arg Arg Gly Arg Arg Phe Cys Ala Ala Gly Ala 20 25 30

Val Pro Ala Ala Glu Arg Gly Glu Asn Gly Ser

```
<210> 173
```

<211> 124

<212> PRT

<213> Homo sapiens

<400> 173

Ser Leu Val Pro Ala Leu Lys Glu Val Val Val Leu Trp Arg Arg Gln
1 5 10 15

Met Val Leu Tyr Leu Val Trp Ala Phe Ile Pro Glu Ser Trp Leu Asn 20 25 30

Ser Leu Gly Leu Thr Tyr Trp Pro Gln Lys Tyr Trp Ala Val Ala Leu 35 40 45

Pro Val Tyr Leu Leu Ile Ala Ile Val Ile Gly Tyr Val Leu Leu Phe 50 55 60

Gly Ile Asn Met Met Ser Thr Ser Pro Leu Asp Ser Ile His Thr Ile 65 70 75 80

Thr Asp Asn Tyr Ala Lys Asn Gln Gln Gln Lys Lys Tyr Gln Glu Glu 85 90 95

Ala Ile Pro Ala Leu Arg Asp Ile Ser Ile Ser Glu Val Asn Gln Met
100 105 110

Phe Phe Leu Ala Ala Lys Glu Leu Tyr Thr Lys Asn

<210> 174

<211> 28

<212> PRT

<213> Homo sapiens

<400> 174

Met Val Leu Tyr Leu Val Trp Ala Phe Ile Pro Glu Ser Trp Leu Asn 1 5 10 15

Ser Leu Gly Leu Thr Tyr Trp Pro Gln Lys Tyr Trp 20 25

<210> 175

<211> 25

<212> PRT

<213> Homo sapiens

<400> 175

Tyr Trp Ala Val Ala Leu Pro Val Tyr Leu Leu Ile Ala Ile Val Ile
1 5 10 15

Gly Tyr Val Leu Leu Phe Gly Ile Asn

<210> 176

```
<211> 22
<212> PRT
<213> Homo sapiens
<400> 176
Gln Gln Gln Lys Lys Tyr Gln Glu Glu Ala Ile Pro Ala Leu Arg Asp
Ile Ser Ile Ser Glu Val
             20
<210> 177
<211> 104
<212> PRT
<213> Homo sapiens
<400> 177
Asn Ser Ala Glu Pro Ala Trp Val Pro Val Cys Ala Arg Gly Gly Gly
                                                         15
Ala Gly Cys Gly Arg Arg Gly Arg Arg Phe Cys Ala Ala Gly Ala
Val Pro Ala Ala Glu Arg Gly Glu Asn Gly Ser Met Val Ser Arg
Ser Thr Ser Leu Thr Leu Ile Val Phe Leu Phe His Arg Leu Ser Lys
Ala Pro Gly Lys Met Val Glu Asn Ser Pro Ser Pro Leu Pro Glu Arg
Ala Ile Tyr Gly Phe Val Leu Phe Leu Ser Ser Gln Phe Gly Phe Lys
Asn Leu Lys Gly Ser Arg Val Cys
            100
<210> 178
<211> 32
<212> PRT
<213> Homo sapiens
<220>
<221> MISC_FEATURE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 178
Leu Ser Pro Arg Leu Phe Asp Ala Gly Ile Leu Leu Trp Gly Ala Ser
```

Val Asn Val Thr Ile Trp Glu Val Arg Xaa Ala Gln Ser Ser Ala Ser

```
<210> 179
<211> 132
```

<212> PRT

<213> Homo sapiens

<220>

<221> MISC FEATURE

<222> (26)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> MISC_FEATURE

<222> (52)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> MISC FEATURE

<222> (69)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 179

Leu Ser Pro Arg Leu Phe Asp Ala Gly Ile Leu Leu Trp Gly Ala Ser

1 10 15

Val Asn Val Thr Ile Trp Glu Val Arg Xaa Ala Gln Ser Ser Ala Ser 20 25 30

Met Leu Pro Ser Ala Trp Gly Pro Leu Gln Val Ala Ser Phe Phe Leu 35 40 45

Leu Ser Phe Xaa Phe Cys Phe Leu Ser Ser Pro His Leu Gly Arg
50 55 60

Gln Glu Thr His Xaa Val Val Leu Glu Asp Asp Glu Gly Ala Pro Cys
65 70 75 80

Pro Ala Glu Asp Glu Leu Ala Leu Gln Asp Asn Gly Phe Leu Ser Lys 85 90 95

Asn Glu Val Leu Arg Thr Arg Cys Leu Gly Ser Arg Ser Gly Ser Ala 100 105 110

Ser Ala Thr Pro Pro Thr Thr Ser Gly Thr Ala Arg Ala Ala Arg Pro 115 120 125

Pro Ser Gln Cys 130

<210> 180

<211> 32

<212> PRT

<213> Homo sapiens

<400> 180

Asn Leu Thr Ser Asp Pro Arg Pro Leu Ala Leu Pro Pro Pro Cys Gly
1 5 10 15

Asp Phe Ile Lys Val Thr Ser Phe Ser Pro Gly Leu Glu Thr His Thr

20 25 30

```
<210> 181
<211> 135
<212> PRT
<213> Homo sapiens
<220>
<221> MISC FEATURE
<222> (14)
<223> Xaa equals any of the naturally occurring L-amino acids
Glu Gln Gln Arg Leu Arg Asp Arg Glu Thr Gln Thr Gly Xaa Asp Ser
Arg Ala Lys Thr Gln Arg Gly Glu Asp Gly Glu Ser Glu Arg Gly Arg
             20
                                  25
Trp Arg Leu Arg Glu Gly Glu Asp Gly Asp Ser Glu Arg Glu Glu Asp
Gly Asp Ser Glu Arg Trp Arg Leu Arg Ser Met Glu Ser Gln Arg Gly
     50
                         55
Glu Asp Gly His Ser Gly Gly Trp Arg Val Arg Arg Met Glu Thr His
Arg Lys Gly Arg Met Glu Ser Gln Glu Arg Leu Glu Thr Gly Glu Gly
Ile Glu Thr Gln Arg Gly Glu Asp Gly Asp Ser Glu Gly Gly Arg Trp
Arg Leu Lys Glu Asp Gly Asn Pro Gly Glu Arg Arg Thr Glu Met Arg
        115
Gln Arg Leu Gly Glu Ala Gly
    130
<210> 182
<211> 220
<212> PRT
<213> Homo sapiens
<220>
<221> MISC_FEATURE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 182
```

15

Gly His Gly Val Ala Gly Xaa Cys Leu Pro Gln Pro Leu Leu Pro Pro

Ser Pro Pro Asp Tyr Asp Glu Arg Ser His Leu His Asp Thr Phe Thr

20 25 30

Gln Met Thr His Ala Leu Gln Glu Leu Ala Ala Gln Gly Ser Phe 35 40 45

- Glu Val Ala Phe Pro Asp Ala Ala Glu Lys Met Lys Lys Val Phe Thr 50 60
- Gln Leu Lys Glu Ala Gln Ala Cys Ile Pro Pro Cys Glu Gly Leu Gln 65 70 75 80
- Glu Phe Ala Arg Arg Phe Leu Cys Ser Gly Cys Tyr Ser Arg Val Cys
 85 90 95
- Asp Leu Pro Leu Asp Cys Pro Val Gln Asp Val Thr Val Thr Arg Gly
 100 105 110
- Asp Gln Ala Met Phe Ser Cys Ile Val Asn Phe Gln Leu Pro Lys Glu 115 120 125
- Glu Ile Thr Tyr Ser Trp Lys Phe Ala Gly Gly Leu Arg Thr Gln 130 135 140
- Asp Leu Ser Tyr Phe Arg Asp Met Pro Arg Ala Glu Gly Tyr Leu Ala 145 150 155 160
- Arg Ile Arg Pro Ala Gln Leu Thr His Arg Gly Thr Phe Ser Cys Val 165 170 175
- Ile Lys Gln Asp Gln Arg Pro Leu Ala Arg Leu Tyr Phe Phe Leu Asn 180 185 190
- Val Thr Gly Arg Pro Arg Gly Arg Gln Ser Cys Arg Pro Arg Ser 195 200 205
- Gly Lys Cys Cys Ala Gly Arg Arg Gly Met Pro Ser 210 215 220

<210> 183

<211> 41

<212> PRT

<213> Homo sapiens

<400> 183

- Gly Asp His Pro His Phe Ile Ser Val Leu Gly Lys Val Gln Arg Glu
 1 5 10 15
- Gly Arg Arg Gly Pro Glu Gly Gln Ala Glu Gly Gln Thr Glu Arg Asn
 20 25 30

Ser Gln Arg Arg Lys Ala Gln Arg Pro 35 40

<210> 184

<211> 129

<212> PRT

<213> Homo sapiens

```
<400> 184
```

Asn Leu Thr Ser Asp Pro Arg Pro Leu Ala Leu Pro Pro Pro Cys Gly
1 5 10 15

Asp Phe Ile Lys Val Thr Ser Phe Ser Pro Gly Leu Glu Thr His Thr
20 25 30

Met Ala Leu Leu Ala Leu Ala Ser Ala Val Pro Ser Ala Leu Leu Ala 35 40 45

Leu Ala Val Phe Arg Val Pro Ala Trp Ala Cys Leu Leu Cys Phe Thr
50 55 60

Thr Tyr Ser Glu Arg Leu Arg Ile Cys Gln Met Phe Val Gly Met Arg 65 70 75 80

Ser Pro Ser Leu Lys Ser Val Arg Arg Pro Ser Arg Pro Pro Ser Arg 85 90 95

Ala Ser Leu Thr Pro Lys Ser Val Arg Arg Pro Ser Thr Leu His Gln
100 105 110

Cys Pro Gly Glu Gly Ala Glu Gly Gly Glu Arg Pro Arg Gly Ser 115 120 125

Gly

<210> 185

<211> 13

<212> PRT

<213> Homo sapiens

<400> 185

Met Leu Val Tyr Gln Asn Gln Ala Gln Phe Ser Ser Asn 1 5 10

<210> 186

<211> 65

<212> PRT

<213> Homo sapiens

<400> 186

Met Leu Val Tyr Gln Asn Gln Ala Gln Phe Ser Ser Asn Met Trp Leu 1 5 10 15

Asn Phe Ser Asp Val His Thr Tyr Leu Ser Ser Ile Ala Leu Leu Cys
20 25 30

Phe Cys Leu Ser Gly Val Leu Cys Cys Ile Cys Asn Asn Ser Val Phe 35 40 45

His Ile Gln Gln Tyr Ile Leu Ile Ile Ile Thr Phe Pro Leu Val Val 50 55 60

Ile

65